Christmas Presents You Can Build

Hot Water Options

Extreme How-To®

The Enthusiast's Guide to Home Improvement

HEATED TILE IN A SNAP

PLUS:

BATHROOM
REMODEL

SAVE ENERGY WITH
INSULATED SIDING

NEW TOOLS
FROM THE WOODWORKERS' CONVENTION

Nov/Dec 2008
www.extremehowto.com

INSTALL GRATIFICATION
TEMPRA® SERIES TANKLESS ELECTRIC WATER HEATERS

- **Unlimited Supply of Hot Water**
- **Saves Energy and Reduces Your Electric Bills**
- **Sleek Design Saves Space**
- **Proven Reliability Backed by a Three Year Warranty**

SAVE ENERGY WATER MONEY

STIEBEL ELTRON
Simply the Best

TOLL FREE **800.582.8423**

www.stiebel-eltron-usa.com

TG® KIK® PRO SERIES

www.MyTGTools.com

FASTER EASIER CLEANER

KIK® Spade Bit KIK® HS Brad Point KIK® Forstner Bit

www.MyTGTools.com 1-800-687-4122

TG® Tools • 1010 Cedar Ave. • St. Charles, IL 60174 • ph 800-687-4122 • fax 630-584-4722

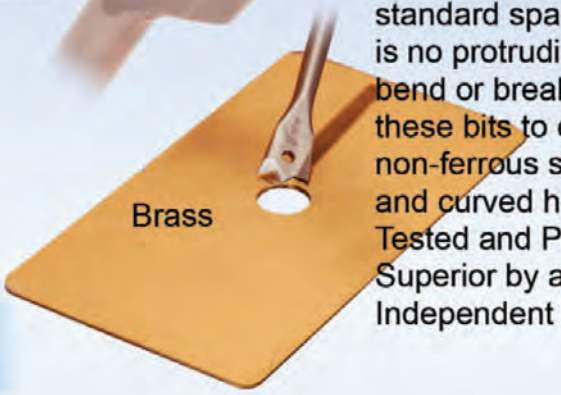
We Put a KIK® in Your Boring Tasks!

6 Cutting Edges

The revolutionary **KIK® Spade Bit** has over 30% more cutting surface making them much faster and longer lasting than standard spade bits. There is no protruding tang to bend or break allowing these bits to even bore non-ferrous sheet metals and curved holes too! Tested and Proven Superior by an Independent Lab.

Plastic

Acrylic



Brass

6 Cutting Edges

KIK® HS Brad Point

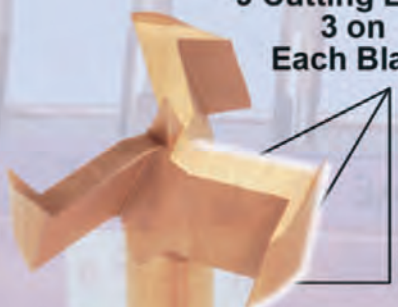
Independent Lab Tested and Proven
Designed for Drilling Sheet Metal, Wood and Plastic Faster, Cleaner with Longer Life and no Walking on the Surface.

In Wood:
- **Approximately 100% Faster** Compared to Common Brad Point
- **40% Faster** Compared to Standard Drill Bits

In Sheet Metal:
- **50% Cleaner** Entry
- Consistently **Round Hole**
- **20% Less Walking**

In Acrylic:
- **No cracking** Drilling Acrylic
- **150% Faster** Compared to Standard Drills
- **690% Faster** Than Other Brad Points

9 Cutting Edges
3 on
Each Blade



KIK® Forstner Bit

Proven Superior by an Independent Lab
Cleaner Entry and Exit

- **Titanium Coated**
- **3-Flat Shank**
  Open Head Design for no Clogging Easy Drilling and Direction Control

- **Bores through Hard Woods 100% Faster** Compared to Standard Forstners
- **Bores**
- **Mills**
- **Routes**
- **Cuts**
- **Bores Curved Paths**
- **Channels**
- **Bores Through Acrylics Cleanly Without Melting** Able to Bore 90 Degree Curved Paths

www.MyTGTools.com 1-800-687-4122

TG® Tools • 1010 Cedar Ave. • St. Charles, IL 60174 • ph 800-687-4122 • fax 630-584-4722

An innovation in flooring has arrived...

Avaire is a new, modular, floating porcelain tile flooring system designed to enable the installer – from the typical homeowner to the seasoned professional – to achieve professional looking results quickly and cost effectively.

avaíre™

ELEGANCE EVOLVED™

888.5.AVAIRE | avairefloors.com

Silence, Comfort and Warmth for your floor.

QuietWarmth®

SCS Pre-Consumer Recycled Content

SCS Indoor Advantage Certified Indoor Air Quality Gold

Heat your floor for pennies a day!

Works Great With Avaire Tile!

Acoustical Flooring Underlayments from MP Global are popular with architects and designers of multifamily housing. Our QuietWalk and Insulayment products are frequently specified to reduce noise transmission between floors in apartments and condominiums. Furthermore, these products are made primarily with recycled fibers, and are certified as a contributor to good indoor air quality.

In addition to sound deadening, our QuietWarmth panels provide gentle radiant heat to warm the floor and help heat the room.

MP global products L.L.C.

Think Green! SUSTAINABLE UNDERLAYMENTS

Your SUSTAINABLE Underlayment Specialists

888.379.9695 | quietwalk.com | quietwarmth.com

DON'T LEAVE
DUST
HANGING
IN THE AIR.

Rapid Coat® Low Dust, All Purpose Joint Compound forms heavier dust particles during sanding for less airborne dust.
Dust falls quickly to the ground instead of hanging in the air for less mess and faster clean up.

Find out more at
www.LowDustLessMess.com

LAFARGE

www.lafargenorthamerica.com

CONTENTS

Nov/Dec **2008**

FEATURES

32 Heated Tile in a Snap
Install a snap-together porcelain tile floor with radiant heat—in a single weekend.

42 Redoing an Old Bathroom
Here's a case study of a bathroom remodel from re-caulking to radiant heat floors.

52 Christmas Presents You Can Build
Create your own gifts with a personal touch.

G-FLOOR®

Floor Cover/Protector

BLT Roll-Out Garage Flooring®

New Metallic Silver Color

Simply Unroll

No adhesives required

- Beautifies garage floor in minutes
- Hides cracks and stains
- Helps prevent concrete damage
- Patterned design reduces amount of dirt tracked into home
- Provides moisture and vapor barrier
- Cushions floor for anti-fatigue benefit
- Very durable—lasts for years
- 5-year limited warranty
- Easy to cut for custom fit
- Easy to move for cleaning
- Reduced noise and insulates

BLT

Better Life Technology L.L.C.

Contact BLT for purchase locations
customerservice@bltllc.com
www.g-floor.com
Qualified distributors—please apply

MADE IN USA

Patents Pending

CONTENTS

EVERY ISSUE

8 **From the Editor**

80 **Advertisers Index**

COLUMNS

10 **Q & A**

14 **Tool School**
New Tools from the Woodworkers' Convention

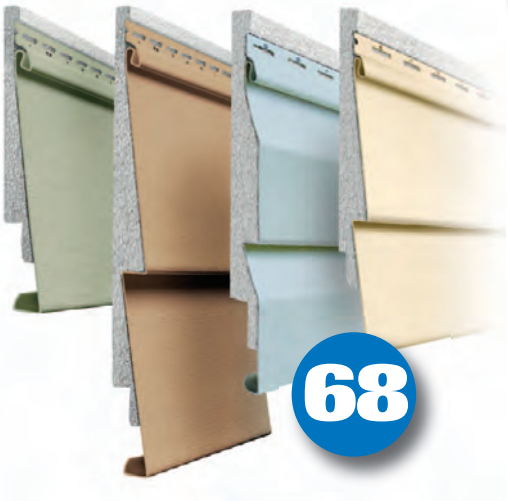
28 **Spotlight**
Organize Your Kitchen with Rev-a-Shelf

DEPARTMENTS

60 **Project Next**
Hot Water Options

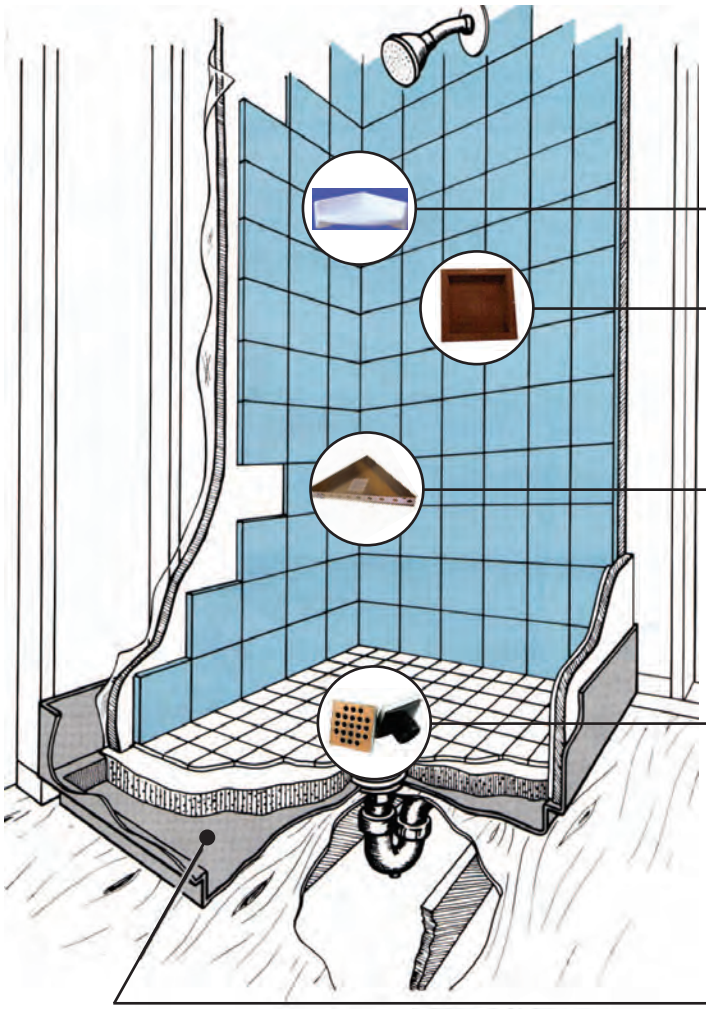
68 **Material Market**
Save Energy with Insulated Siding

74 **Hot Products**



DixSystems.com

YOU CAN DO IT!



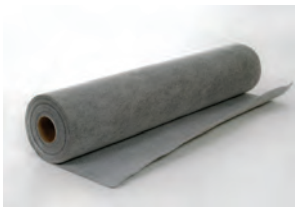
- ***Shampoo Shelves***
- ***Recessed Shampoo and Soap Shelves***
- ***Bench Seats***
  - *Waterproof System*
- ***Square Drains***
  - *Multiple Options and colors*

OneLiner

- ***Water Proof System Kit***
  - *A one-piece pan constructed from polyethylene without any folds or seams*
  - *Is quick and easy to install*
  - *Very difficult to be punctured or torn*
  - *Pre-sloped to the drain to allow for total drainage*
  - *Helps to eliminate mildew problems due to it's total drainage design.*

Cerami-Tech Membrane

Cerami-Tech® thermo-acoustic membrane is manufactured for ceramic and stone tiles installation over wood or concrete structures. Specially designed for ceramic tiles installations, Cerami-Tech thermo-acoustic membrane provides the comfort and the quietness of a superior soundproofing. The membrane exceeds soundproofing requirements of condominiums and multi-unit buildings. The R factor (thermal resistance) of the membrane stops the cold coming from the concrete slab from reaching your floor. The aluminum film reflects temperature keeping your feet more comfortable.



Warmly Yours

The TempZone Radiant Heating System Under Tile and Stone is our system that has been installed in thousands of homes. These homes now have the luxury of heated floors to keep you warm even after stepping out of the shower. Mesh backed rolls, embedded in thinset cement at the time floor installation is conducted. The product is ideal for Ceramic Tile , Stone and Hardwood floors . For heated areas smaller than 150 square feet we recommend the 120V heating rolls; for areas over 150 feet we recommend the 240V heating rolls. There is not heating efficiency differences between 120V and 240V.

YOU Pick Your Tile & Design. _WE_ Protect You From Problems!
WE MAKE IT EASY — YOU CAN DO IT!

888.450.0112
www.DixSystems.com

LETTER *From The Editor-In-Chief*

Prospective first-time home buyers take note: The U.S. federal government is offering a tax credit that works like an interest-free loan. The credit (maximum $7,500) is available for homes purchased on or after April 9, 2008 and before July 1, 2009.

This is a great opportunity to help out with the up-front cash needed for closing costs and down payments. Prospective home buyers who qualify for the tax credit are permitted to reduce their income tax withholding. Reducing tax withholding (up to the amount of the credit) will enable future home buyers to accumulate cash by raising their take-home pay. This money can then be applied to the down payment.

Single taxpayers with incomes up to $75,000 and married couples with incomes up to $150,000 qualify for the full tax credit. The credit must be paid back over a 15-year period, but can provide the help needed for many first-time buyers to make their home-ownership dreams a reality. According to Sandy Dunn, president of the National Association of Home Builders, "This could be the trigger that helps move prospective first-time buyers off the fence and back into the market. But it won't last forever."

So, spread the word. Although, you may already own a home, you may have friends or family members who are ready to take the plunge, and they may not be aware of this opportunity. For more information, visit www.federalhousingtaxcredit.com, a website that contains useful information on the tax credit, including eligibility requirements. The site provides a brief overview on how the credit works, answers to "frequently asked questions," and it covers the law's other provisions. Hopefully, this will be the shot in the arm that helps get America's housing sector back on its feet.

Extreme How-To

EDITOR-IN-CHIEF
Matt Weber

COPY EDITOR
Tanya Thompson

CONTRIBUTING WRITERS
Monte Burch
Larry Walton

ADVISORY BOARD
Monte Burch
Kevin Hayes
Kathy Ziprik
Mark Clement

CREATIVE DIRECTOR
Wesley Glassco

CIRCULATION
Walter J. Riley

PUBLISHER
Chad Gillikin

ADVERTISING SALES DIRECTOR
Jeremy Hollingsworth

ADVERTISING SALES
Rusty Corley
Hal Jones
Jan Logan
Luke McGlothin

BUSINESS MANAGER
Dusty Statham

REPRINTS
Nedda Maloles
717-481-8500
nmaloles@reprintdept.com

SUBSCRIPTIONS
Kable News
888-587-8911

LATITUDE3 MEDIA GROUP, LLC

PRESIDENT
Trent R. Boozer

EXECUTIVE VICE-PRESIDENT
Chad Gillikin

EXECUTIVE VICE-PRESIDENT
Val Carrier

SENIOR VICE-PRESIDENT
Mark Gamble

Extreme How-To is published by
LATITUDE3 MEDIA GROUP, LLC
1111 Edenton Street
Birmingham, AL 35242
Phone 205.949.1600 · Fax 205.949.1601
www.extremehowto.com

Extreme How-To (ISSN 1540-5346) is published and distributed monthly to DIY home improvement enthusiasts by Latitude3 Media Group, LLC, 1111 Edenton Street, Birmingham, AL 35242 (executive and editorial offices).

All rights reserved. Neither this publication nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission of Latitude3 Media Group, LLC.

Subscriptions: U.S. and possessions: 1 year (9 issues – $18.97); foreign, 1 year (9 issues – $32.50) U.S. funds only. POSTMASTER: Send address changes to *Extreme How-To* PO. Box 426, Mt. Morris, IL 61054-0426. SUBSCRIBER SERVICE: To order a subscription or change your address, write to *Extreme How-To* PO. Box 426, Mt. Morris, IL 61054-0426, or call 888-587-8911; or E-mail to ehtw@kable.com; or visit our Web site at www.extremehowto.com. To order back issues, call (205) 949.1603.

The information in ***Extreme How-To's*** editorial content is intended to explain and simplify home-improvement tasks. Tools, products, materials, techniques, building codes and local regulations change; therefore, ***Latitude3*** assumes no liability for omissions, errors or the outcome of any project. The reader must always exercise reasonable caution, follow current codes and regulations that may apply, and is urged to consult with a licensed professional if in doubt about any procedures.

Printed in the USA

DON'T KNOW ABOUT JIG-A-LOO YET?

It's the revolutionary product that combines the power of a **lubricant** with the properties of a **water-repellent.**

- Dry silicone
- Doesn't stain
- Doesn't stink

3 TOOLS IN ONE

PREPARING YOUR WALLS FOR YOUR NEXT PAINTING PROJECT?

2008 WINNER OF Retailers' Choice Awards

Try Jig-A-Patch. It's the world's 1st **sprayable spackling drywall filler!**

Now available at The Home Depot!

Q&A Got a ?

*Questions About Home Building, Remodeling? Have Your Own How-To Tip? Visit our website at **www.extremehowto.com** and click on Home Repair Forum.*

Q: *I have a new pre-primed steel door I plan on painting. There is an oval window in the center of the door with plastic molding around it. What is the best way to apply the paint? And, can the window molding be painted or should I just tape around it?*

A: For steel doors, we would recommend 100-percent acrylic latex exterior paint so it will be able to expand and contract with the extreme heat that metal doors will retain. Using a sprayer will achieve the best finish, and a high-quality acrylic latex paint will be formulated with levelers to even out the finish and help it lay down without adding any thinning agents. Regarding the plastic molding, door manufacturers do not recommend painting the molding, because if a darker color is used the molding will disfigure and warp (darker colors will get hot). If you are painting, a light color should be fine, but prime the molding first with an acrylic primer.

Q: *I'd like to install a new bathroom in my basement, but there are no existing drain lines in the foundation slab. Are there any other options aside from tearing up the slab?*

A: Yes, you can install a macerating toilet. These toilets use a macerating blade to chop up solid waste, and have a pump that forces the waste through the plumbing against the force of gravity. In other words, these toilets basically flush upward, so you can install them on a slab and run drain lines from the pump to the existing main drain of your home. For more information, just type "macerating toilet" into a Google search.

TIGER FOAM Insulation

Unleash the Beast on Your Insulation Project

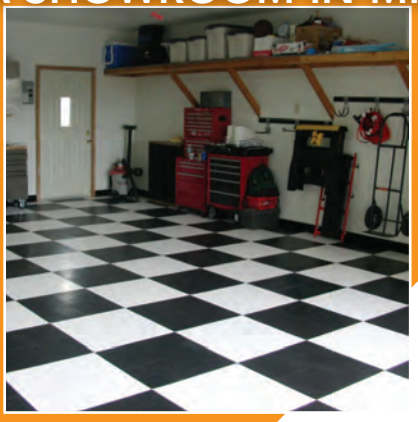
Portable, Disposable, Closed-Cell Polyurethane Foam Insulation Kits

- New Construction / Retrofit
- No power or machine required
- Cavity Fill
- Flotation
- Refrigeration
- Cold Storage
- Highest R-Value
- Moisture Resistance (perm 1.2)
- Metal Buildings
- Pipes within Pipes
- Soundproofing & Vibration
- ASTM E-84 Fire Rated
- Economical and easy to use
- Highway, Bridge and Pipeline
- Boats, Ships, Spas
- 100s of uses…

Visit www.tigerfoam.com for more information
Or call us at: 866-240-7622

Tiger Foam: Because it's a jungle out there!

MAKE YOUR GARAGE INTO A SHOWROOM IN MINUTES



GARAGE FLOOR TILE SYSTEMS

10-year limited warranty!

- Removable flooring — if you move, take it with you.
- Easy installation — There is no surface preparation required other than to sweep the floor clean.
- Durability — Strong and tough enough to sustain the weight of heavy vehicles. We use UV protection so the tiles won't fade in color, rust, or corrode.
- Not easily affected by petroleum products such as grease, oil, or gasoline.
- Maintenance — To clean the garage floor tiles, you can sweep up any dirt and simply spot clean with water and a mild soap and then wipe dry.
- Hides cracks and stains.

Need help designing your garage floor?
Go to the following link for our online designer: www.floorjunkies.com/designer

FLOOR JUNKIES .com

Toll Free: 877-595-2040

Q&A Got a ?

Questions About Home Building, Remodeling? Have Your Own How-To Tip? Visit our website at ***www.extremehowto.com*** *and click on Home Repair Forum.*

Q: *I noticed only three of the six screws that hold my kitchen cabinet on the wall are anchored in a stud. The other three were so loose that they pulled out of the wall with my fingers. How do I fix this?*

A: The installers must have missed the studs when fastening the cabinet. The screws that pulled away were likely only fastened to drywall or plaster and they stripped out from the weaker material. The easiest way to locate the studs is to use a stud finder above or below the cabinet case. Once you know the wall stud location, you can measure inside the cabinet to locate where you'll drive a screw through the back of the case and into the stud. The stud is probably just to the left or right of the existing screw hole. Use screws that are a minimum of 2-1/2 inches, and choose fasteners with large heads or washers to make sure the cabinets cinch up to the wall.

Q: *My wife and I are having granite countertops installed. First, we need some shim work completed, and the guy doing the shimming said the shims would be visible beneath the counter. How do we cover up the shims? Is it typical to use some sort of molding underneath the counter and at the top of the cabinet?*

A: The countertop should not be shimmed. For granite countertops, the cabinets should be completely level across the top. Any shimming should be done at the bottom of the cabinets—not the top—so the countertop can sit on a perfectly level surface. **EHT**

Buy Factory Direct with Coast-to-Coast Delivery

The Perfect Spiral Stair for any Project.

Call Salter Industries at 1-800-368-8280 or 610-489-5799 for 40-Pages of FREE Brochures

- Factory direct purchasing saves you money!
- Customer service department standing by 9:00am-5:00pm EST
- BOCA Code, UBC Code, IRC 2003,IRC 2006, and IFC 2006 code compliant

Salter Industries
The Leader in Spiral Staircases

For FREE Quote call 1-800-368-8280 or visit us at www.salterspiralstair.com/eht

LAWN STRYPER

Lawn Striping System™

Pattern Your Lawn Like The Pros!™

INCLUDED!
Lawn Patterning Guide Booklet.

Specifically designed for walk-behind, self-propelled and push lawn mowers.

- **ONE tool assembly.**
- **Easy to attach – Easy to maintain.**
- **3 Custom colors** ■ ■ ■ **to choose from.**

MADE IN AMERICA
Patent(s) Pending

www.patternyourlawn.com

FOR DEALER INQUIRIES, CALL 1-888-208-5184

S&B LAWN SYSTEMS INC.

New Tools from the Woodworkers' Convention

Innovative Woodworking Tools Exhibited at IWF

Rip straight stock from crooked boards using the EZ Jointer Clamp from General Tools & Instruments.

By Matt Weber

When the topic of "new woodworking tools" showed up as an editorial topic for this month's issue of *Extreme How-To*, I enjoyed a rare instance of lucky scheduling. Just one state away in Atlanta, Georgia, the IWF woodworking convention was taking place in August. This gave me a sweet opportunity to dash over the state line and scope out the latest tools and gadgetry the industry has to offer. Although the show is geared heavily toward professional tradesmen, there's plenty of crossover appeal to pique the interest of hobby woodworkers and serious DIY'ers. Here's a glance at some of the products we found on display.

EZ JOINTER CLAMP WITH SWING ARM

The E-Z Jointer Clamp Kit (Model 846) from General Tools & Instruments is an innovative alternative to expensive jointers. The latest version has the addition of an extendable swing-arm that supports extra-wide boards during table saw ripping operations. Use the Jointer Clamps to attach any board—no matter how crooked—to a piece of straight stock, then run the stock along the rip fence to rip a matching straight cut along the crooked board. The Jointer Clamp works in two easy passes and is great for use with wide or long stock. It works on any table saw with a rip fence. Use the kit to rip crooked boards straight in two easy passes, salvaging damaged or imperfect stock. Visit www.generaltools.com.

SCRIBE WITH YOUR ROUTER

Walls and edges seldom fit squarely against a new countertop, cabinet or panel because of bends and bows in the surface. These obstructions require scribing the work to match the wall. The QuickScribe is a trim router accessory plate that attaches to several popular routers, including Bosch, DeWalt and Porter-Cable brands. These new accessories center the router's bit in a wheel that attaches via a plate to the bottom of the router, allowing the router to be used as an accurate scribing tool. The QuickScribe uses the non-marking and non-sticking wheel to glide freely against the wall or placement surface. The wheel keeps a constant distance of 1 inch from the wall to the cut.

Honey...

You left the garage door open again!

HyLoft storage products get friends and neighbors talking.

We understand that home organization and garage storage needs differ from family to family, homeowner to homeowner. Our award winning garage storage and organization systems are engineered to meet the evolving needs of an active family. HyLoft products rate at the top of consumer satisfaction reports and carry a limited lifetime warranty.

HyLoft
Unique Storage Solutions

1.800.990.6003 www.hyloft.com Also available at your favorite home improvement retailer

US Patents 7152535; 6435105; 6409031; 6715427; D416152; D459926; D477957; D470353; China Patent 20058000248.8; US and International Patents Pending. Copyright 2007 HyLoft, Inc. All Rights Reserved.

Inventor Bill Friegang explains the tool's inception: "Basically, I'm a lazy guy. I don't like working that hard and I'm always looking for an easier way to do difficult, time-consuming jobs. The wheel follows the wall, guiding the router, while the router does the cutting for you. It saves quite a bit of time from the old method. This system eliminates the need of masking tape, scriber tools and belt sanders.

"When installing a large piece in a small room, this tool also saves the wall from possible scuffs," adds Friegang. "It saves you from having to lift the piece out to whittle it down and then lift it to put it back in again. And with a precise fit, there is no need to caulk." Visit www.thescribingtool.com.

GRIZZLY BANDSAW WITH MOTOR BRAKE

Grizzly Industrial introduced its new Model G0513X2B 17-inch bandsaw at IWF. The 2-horsepower, 220-volt single-phase motor features a built-in magnetic motor brake that stops the blade in less than 3 seconds for heightened safety. The heavy-duty table trunnion ensures the table remains extremely rigid, and the table extends for 23-5/8 by 17-1/4 inches of working space.

Radiant Heat
At a price that's hard to beat

Go With the Best

Using the highest-quality radiant floor heating components, **Hannel Radiant Direct** provides contractors and home owners the best design, products/technology, and service. Our RPA-certified design team has worked on thousands of projects installed throughout North America and provide support after the sale to insure a successful installation.

Benefits of **Radiant Direct** Heat

- **Comfort:** Even heat from the floor up, with no on-off temperature shifts. No fan or blower noise, and no blowing dust or mites.
- **Efficiency:** Heat your home for 30% to 50% less than with a standard forced-air system.
- **Flexibility:** Heat areas of your home to different temperatures, heat domestic water, or use it to keep your driveway or walk clear of snow.

Make It Easy On Your Pocketbook

Hannel Radiant Direct brings you the luxury of radiant heat at a price very competitive with standard forced-air systems. For around $3 per sq. ft, you can have the steady, quiet, clean comfort that only radiant floor heating can provide. **Hannel Radiant Direct** systems are typically 1/2 to 1/3 less than those installed by a radiant system contractor.

Contact us for a FREE quote today!
888.298.6036 or www.radiantdirect.com

Hannel RADIANT DIRECT Hannel ARCTICOOL

Visit us online at **www.radiantdirect.com** or call **888-298-6036** toll-free

TI·PROBOARD is the secret to a new foundation for outdoor living with Tile or Stone

A Veranda is a cool look with your own style and elegance

For more information call 800.406 TILE or visit our web site ***www.tiproboard.com***

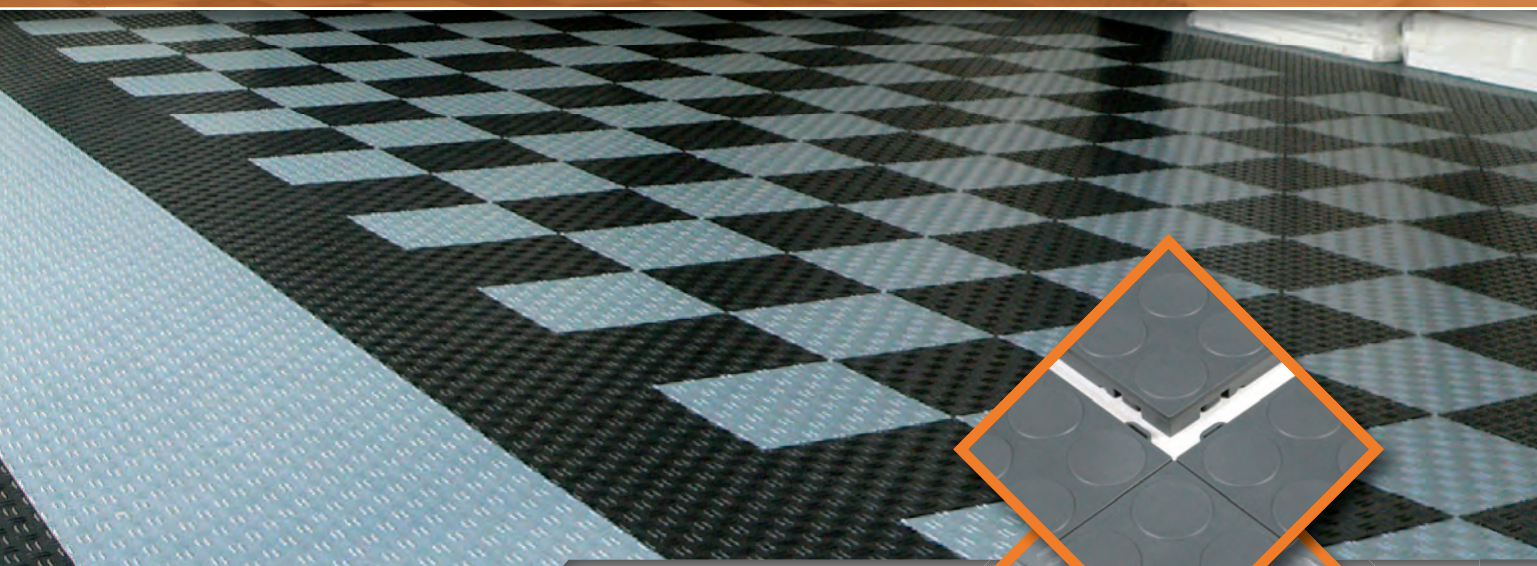
The heavy-duty cast iron fence comes with a removable 6-inch aluminum resaw fence attachment. The computer-balanced cast iron wheels are decorated with Grizzly's trademark bear head cutouts and feature a lower wheel brush. Additional features include double upper and lower ball-bearing blade guides and a quick-release blade tensioner. Visit www.grizzly.com.

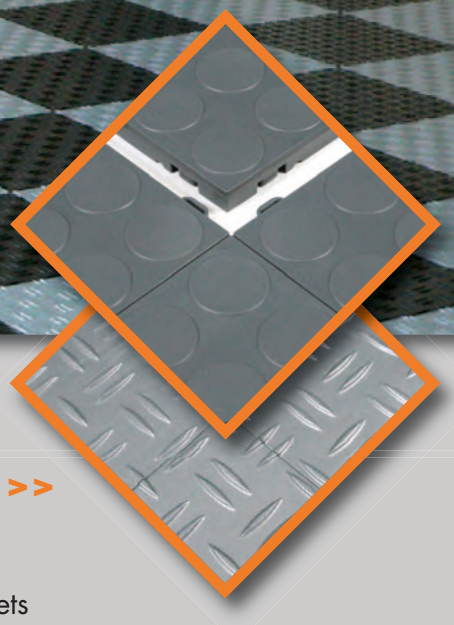
KING OF PARALLEL CLAMPS

The new K Body Revo parallel clamp is a powerful solution to high-pressure clamping or spreading applications. This redesigned K Body clamp offers 30 percent more clamping surface and 25 percent more clamping force. The enhanced design also offers a new end rail clip, rail protection and many accessories. The large, flat parallel clamping surface is made of impact- and break-resistant polyamide, and comes with three replaceable pressure caps that are glue-, paint- and grease-resistant. The strong internal frame ensures accurate 90-degree angles that remain sturdy even at maximum pressure. The larger replaceable handle is

SO NICE YOU MAY WANT TO PARK YOUR CAR *OUTSIDE.*™

JNK PRODUCTS INTRODUCES IT'S AMERICAN MADE GARAGE FLOOR TILE STARTING UNDER ***$3.50 A SQUARE FOOT***.





THE ADVANTAGES:

- ★ Available in a sleek coin pattern or rugged diamond pattern >>
- ★ No Glue, No Mess, No Floor Prep
- ★ Tiles easily click together without the use of hammers or mallets
- ★ 5 Point per side locking system keeps tiles locked tight and minimizes movement
- ★ Stain Resistant Surface is guaranteed not to stain
- ★ 13" tile increases speed of installation
- ★ Highly Engineered Support structure ads strength while allowing moisture underneath to evaporate
- ★ Color coordinated base molding, stair treads and riser material available.
- ★ Available underlayment reduces noise and protects concrete underneath.

JNK PRODUCTS

GARAGE FLOORING FROM THE GARAGE FLOORING EXPERTS.

JNK PRODUCTS, LLC | 1-877-873-3736 | WWW.JNKPRODUCTS.COM

made of a two-component composite with a soft plastic insert for comfort while working. The replaceable rail protection pieces elevate the workpiece from the rail to avoid glue buildup. Plus, the removable tail-piece ensures the clamp sits parallel to the rail, and can easily be removed and reversed on the sliding arm for use as a spreader. Available with openings from 12 to 98 inches, the K Body REVO offers 1,500 pounds of nominal clamping pressure. Visit www.besseytools.com.

FOR INTERIOR AND EXTERIOR USE ONLY.

Our trim boards make great rake board outside or base board inside. Tongue and groove bead board? Equally at home as a porch ceiling outside or wainscoting inside. Our Moldings Collection adds the perfect finishing touch for interiors. Everything you need for interior and exterior applications. And it's all made from our high-quality, fingerjointed, triple-primed wood.

Manufactured in the U.S.A.

Always smooth, tight and clear.
Consistently true.
Technically superior.

Call 888/229-7900 or visit us at www.WindsorONE.com

WindsorONE™

NEW JIGSAWS FROM MAKITA

Hot off Makita's production line are the AVT Top Handle (4350FCT) and the AVT Barrel Grip (4351FCT) jigsaws. Both jig saws feature anti-vibration technology, along with a dynamically balanced motor for more than 40-percent reduced vibration and noise than competitive models. Both saws include three

orbital settings plus a straight-cut setting, and are powered by a 6.3-amp motor for cutting all varieties of materials. The electronic variable speed control (800 to 2,800 SPM) maintains consistent speed throughout the cut for superior results. Makita also engineered comfort and control features into the new saws, such as an L.E.D. light

Cuts Carpet & Carpet Pads, Clamshell Packaging, Vinyl Flooring, Upholstery, Leather, Felt, Suede, Denim, Card Stock, Poster Board, Foam Board, Wallpaper, Shelf Rubber Material, Contact Paper

Like Butter.

Bubble Wrap, Shrink Wrap, Wrapping Paper, Cardboard, Old Credit Cards, Newspaper, Window Screens, Gardening Materials, Insulating House Wrap, Sandpaper, Drywall Sanding Sheets, Small Gauge Wire, Plastic Banding Straps, Plastic Barrier Fencing, String, Rope, Waterproof Liners, Vinyl Siding... And so much more.

The New Skil POWER CUTTER™
The right way to cut stuff.

Forget utility knives or cheap powered scissors, now you can quickly and safely cut through hundreds of materials with the new Skil Power Cutter.

It's lightweight, easy to use and because it's powered by Skil's Lithium Ion technology, it's always ready to go when you are. The innovative Auto Sharp System makes blade changes a thing of the past and ensures continually precise cutting performance.

The New Skil Power Cutter—the right way to cut stuff.

www.skiltools.com

POWERED BY LITHIUM ION

SKIL®

Do it right. Do it with Skil.™

that illuminates the line of cut, while a built-in dust blower clears the line of cut for greater visibility. The ergonomically designed rubberized grip on both grip models provides greater comfort and control. And the patented toolless blade change system provides fast and easy installation and removal of Tang shank blades. The die-cast aluminum base adjusts up to 45 degrees right or left with a positive stop at 90 degrees. Visit www.makitausa.com.

LOW PROFILE SANDER FOR BETTER CONTROL

Porter-Cable unveiled its Low Profile Sanders (models 390K, 392 and 394) that feature new patent-pending Enduratech motor technology. Rated at 3 amps, the

Enduratech motor uses brushless technology that reduces the number of wearable components by 71 percent, giving the motor 5 to 10 times longer life in testing compared to traditional palm-grip sander motors. Besides increased durability, the Low Profile Sanders feature two innovations for improved performance: electronic load control and electronic motor braking. Electronic load control helps maintain pad speed by increasing power under load conditions, removing material up to 42 percent faster than traditional random orbit sanders. The electronic motor braking stops the sander almost immediately, so the user can safely set the sander down without waiting for the pad to stop. As for its unique shape, Porter-Cable borrowed from the low profile design of pneumatic sanders to reduce the tool's overall height. The lowered center of gravity places the user's hand 31 percent closer to the material being sanded for better control and a smoother finish. Visit www.deltaportercable.com.

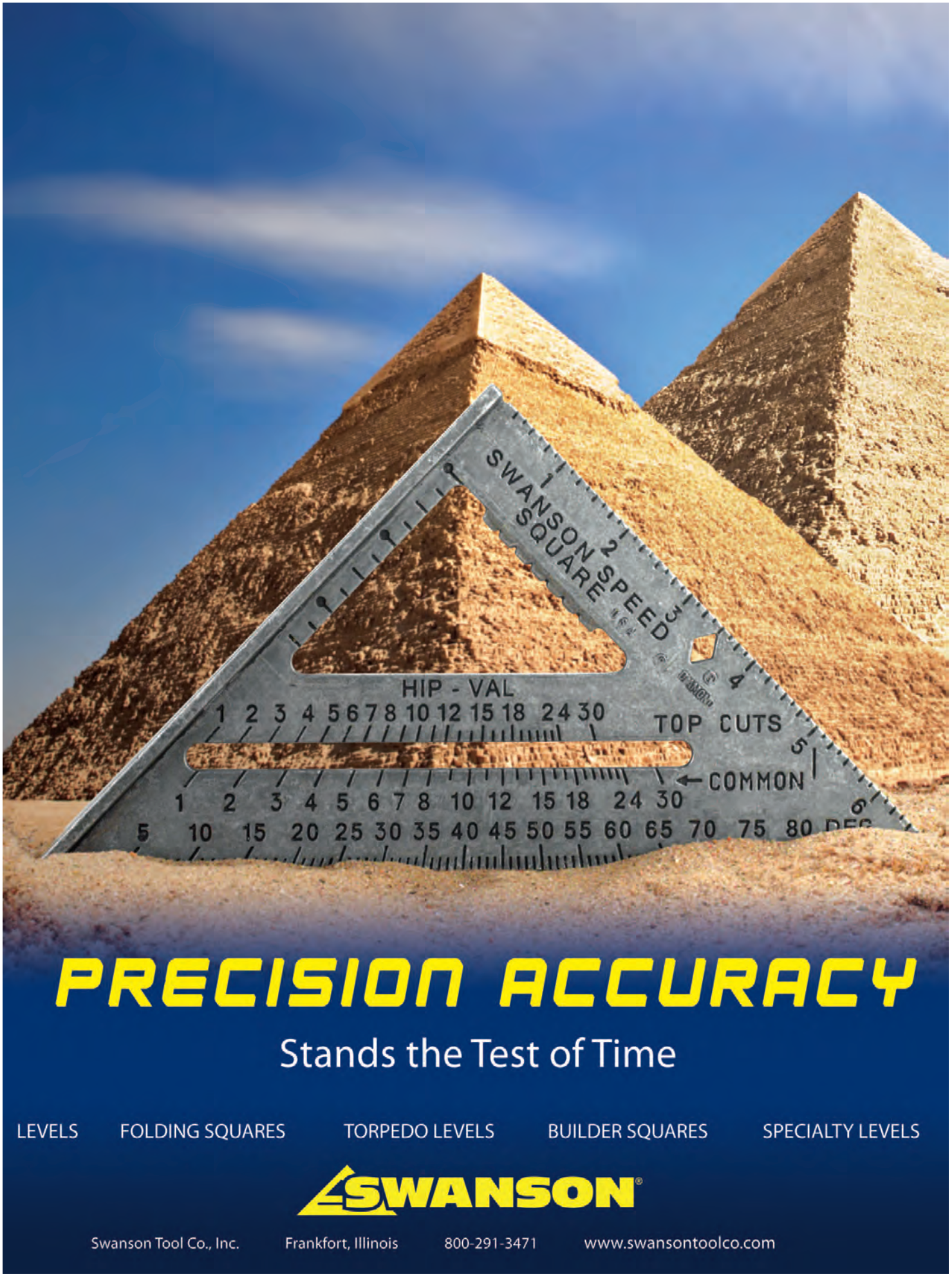
ROUT A ROLL-TOP DESK

Amana Tool offers some new specialty router bits that let you cut the components to create a custom roll-top desk. Lonnie Bird's Tambour/Appliance Garage Door Bits is a three-piece router bit set designed for creating tambours without the need for wires,

Register To Win!

Register today to enter the
Extreme How-To and **Skil Power Tools**
Monthly Sweepstakes, plus receive the next Digital Issue of ***Extreme How-To*** absolutely free!

www.extremehowto.com/xh/monthlytoolsweepstakes.asp



PRECISION ACCURACY

Stands the Test of Time

LEVELS FOLDING SQUARES TORPEDO LEVELS BUILDER SQUARES SPECIALTY LEVELS

SWANSON®

Swanson Tool Co., Inc. Frankfort, Illinois 800-291-3471 www.swansontoolco.com

canvas or glue. The unique patent-pending design shapes slats that interlock. Assembly is easy. Simply slide the slats together to create a beautiful, flexible tambour that's perfect for creating not only roll-top desks, but breadboxes or kitchen countertop storage areas. Each slat measures approximately 1/2 by 1 inch, and the minimum radius for the tambour door is 3-1/2 inch. Visit www.amantool.com.

DR® LEAF AND LAWN VACUUM
LEAVES NOTHING IN ITS PATH. EXCEPT THE COMPETITION.
Beefy steel frame. Hard shell collector. Commercial grade engines. No other lawn vacuum is built stronger or lasts longer. So put an end to fall cleanup hassle. Discover the uncomprimising performance and quality of the DR® LEAF and LAWN VACUUM.
UNSTOPPABLE POWER
Collect and shred acres of leaves, pine cones, pine needles, grass clippings, nuts.
HUGE CAPACITY Exclusive shredding action reduces debris 10:1, for more vacuuming and less unloading.
SELF-PROPELLED MODELS
for smaller properties and close quarters cleanup.
6-MONTH RISK-FREE TRIAL
Try it at home and then decide.
LIFETIME WARRANTY IMPELLER
Serrated design shreds debris into a fine mulch.
Call or Go online for your FREE DVD and Catalog!
PROFESSIONAL POWER FOR HOMEOWNERS
DR
Call Toll-Free
1-877-201-7111
Go Online
DRleafvac.com

NEW PRO-GRADE BITS FROM TREND

Trend Routing Technology launched a new range of professional router bits, including 96 of their most popular tungsten carbide-tipped (TCT) cutters for use with plunge-style and fixed-base routers. The TCT engineering gives the bits extra long life and an anti-kickback design. The range of bits includes straights, trimmers, shaped, panel bits,

YOU ARE PLANNING TO INSTALL A COLUMN WRAP ON SATURDAY AT 9:00.

WHAT DO YOU HAVE PLANNED FOR 9:15?

PVC Column Wraps from Fypon®

PVC Column Wraps from Fypon® combine classic style with today's performance and unbeatable efficiency. Each comes in a complete kit with cap, base and external squaring blocks and is backed by a limited lifetime warranty. Plus, the unique patent pending, semi-assembled, two-piece design cuts installation time to around 15 minutes.

PVC Column Wraps from Fypon. Performance and efficiency are easy when you have the right stuff.

FYPON®
The Right Stuff.™

New Patent-Pending Design • Easy Installation • Limited Lifetime Warranty

www.fypon.com · 800.446.3040

Paint Relief

These are just five of the practical accessories that can prevent headaches associated with tackling household painting projects. You'll find more of these stress relievers in our free 276-page woodworking tools catalog.

1. Magnetic Paintbrush Holder
Designed to clip to the rim of any size of can, this ABS paintbrush holder has integral magnets to securely hold a brush ferrule, allowing liquids to flow from the bristles back into the can. Includes a metal tab for opening cans. **67K74.02 $3.50**

2. Set of 4 Palette Knives for Woodworkers
More flexible than a good drywall knife, these palette knives are just right for applying filler in restricted areas or for painting in tight spaces where a brush would be too messy. Forged stainless-steel blades (1/2" to 1 1/2" wide) bedded in hardwood handles. **35K09.01 $9.95**

3. Pocket Scraper
Ideal for intricate, hard-to-clean areas on window casings, doors and moldings, this 7 1/2" long scraper comes with a triangular carbide blade and a plastic clip-on sheath. **97K52.10 $22.50**

4. Painter's Pyramid™
Molded from a solvent-resistant polymer, these simple 2" high supports elevate a project, giving access to multiple surfaces at once. They are quick to set up, non-marking, and nest together neatly for storage. Each has a load rating of 200 lb. Sold in packages of 10. (Color may vary.) **88K58.70 $6.50**

5. Disposable Natural-Bristle Brushes
Pure Chinese bristle brushes with wooden handles.
Set of 30 (10 ea. 1/2", 1", 2") **56Z99.30 $14.60**
2 1/2" Brushes (10) **56Z99.24 $8.60**
2" Brushes (10) **56Z99.22 $7.50**
1 1/2" Brushes (10) **56Z99.23 $5.80**
1" Brushes (10) **56Z99.21 $5.10**
1/2" Brushes (10) **56Z99.20 $4.10**

To order any of these products, or to request our catalog, call or visit us online.

1-800-683-8170
www.leevalley.com
Shipping & N.Y. sales tax extra.

Lee Valley & veritas®

dovetail and jointing tools. There is also a kitchen countertop routing pack. The professional range of bits is packaged in reusable storage tubes and is aimed at both the contractor and the hobbyist. Visit www.trend-usa.com.

X MARKS THE SPOT WITH JET DRILL PRESS

There's no question that a free-standing drill press is a shop asset when it comes to accurate drilling. The new Jet 17-inch Drill Press features an innovative cross-point laser. Mounted to the head, the AC-powered dual laser guide provides pinpoint accuracy with a visual "crosshairs" indication on exactly where the bit enters the workpiece. The laser operates from its own on/off switch located on the power head. In addition to the laser, the drill press has its own work light to illuminate the work area. The multi-featured drill press features an extra-large 14-by-18-inch cast iron work table with two T-slots to accept jigs and other accessories. The table also has an integrated ledge that surrounds the tabletop to support clamping operations. A replaceable MDF center insert is also included. Powered by a 9-amp, 3/4-horsepower, single-phase, 115-volt motor, this new freestanding drill press offers 16 speeds from 200 to 3,620 rpm for drilling or sanding a variety of materials, including wood, fiberglass, PVC and metals. Visit www.jettools.com. EHT

Alpha Clamp
The New Generation of Bar Clamps
Don't like it we'll Buy it Back!
Alpha-Clamp
Alpha Clamp, the only clamp like it in the world.
Does what other clamps are mechanically unable to do.
Adjustable throat depth 12" +
Spreading capabilities 33"
And much-much more!
Made In USA
By Lowell Thomas Tool, Inc.
Bozeman, Montana
406-595-3416
www.AlphaClamps.com

Organize Your Kitchen with Rev-a-Shelf

By Monte Burch

If there is one room in the home that benefits the most from organization, it's the kitchen. That's where the most work is done in my house. My dad ran a custom cabinet shop for 20 years and he was always building in customized kitchen organizers. Pop-up mixer shelves, hand-made shelves that rolled out on heavy-duty drawer slides and lazy susans were just a few, not to mention the more unusual.

The Rev-A-Shelf company makes it much easier for the homeowner to become organized, with a number of manufactured kitchen storage products. These upscale, quality products require nothing more than a cordless drill/driver, screwdriver and tape measurer for assembly and installation.

One of the most common and useful items is the lazy Susan rotating racks that are used to fill corner cabinets. A wide range of rotating shelves is available from the company to accommodate any cabinet shape and size. The lazy Susan may be made of wood, polymer or stainless steel shelves to suit a wide range of décor. They include a variety of shapes as well: full circle, kidney, d-shape, pie-cut and half-moon designs. The better products have independently operating shelves. The easiest ones to install feature a Twist-N-Lock support rod system. Full circle units fill the entire cabinet and can be reached from the door on either side of the corner cabinet. D-shape units are made to fit corner cabinets with a single center door.

Pie-cuts are used on cabinet corners without upright stiles, and the corner doors are fastened in place to the edges of the shelves, with the doors rotating back into the cabinet as the shelf turns. Even tough-to-fit blind corner cabinets can utilize the half-moon style Rev-A-Shelf units. These units fasten to one corner door and open out into the room as the door is opened. Although most think of these corner units for base cabinets, smaller units are also available for upper cabinet corners.

One of the more unusual units is the Rev-A-Shelf Chrome Blind Corner Optimizer. These take corner organization to a whole new level. The Optimizer front baskets pull out, and then slide over to allow the rear baskets to be pulled out for total access to the items stored within.

A number of other manufactured kitchen organizers are available from Rev-A-Shelf. Today in-cabinet storage units are not just the old

Rev-A-Shelf has a wide range of kitchen organizers that can make your kitchen more efficient and easier to use. Shown is a pull-out under-the-sink shelf, designed to fit around the sink plumbing.

ARMSTRONG'S WOOD STAINS

Long Lasting, Easy to Apply

Environmentally Friendly Wood Stain Products

Manufacturers of VOC-Compliant, Oil-Based Wood Finishes

Photos compliments of Alan Broom, www.shinebritellc.com

DIRECT INTERNET SALES

For FREE sample cans, just let us know.

(800) 916-8211 • www.armclark.com

utilitarian design. Many are available in a wide range of designs in wood, in white metal, stainless steel, chrome and a number of brushed-metal finishes. Some of the most popular are pull-out trays, shelves and baskets. Other cabinet accessories include: door-mounted cutting boards, bottom-mount waste containers, spice racks, and a wide variety of drawer organization systems. Drawer organizers are also a very important factor in cabinet organization, and again a wide range of products are available.

Cabinet pull-outs have also become some of the most popular cabinet organizers. These slide back in the cabinet for storage, pull out easily and provide lots of organized storage that's extremely easy to access. The Rev-A-Shelf base cabinet pull outs, for example, feature adjustable shelves with chrome rails to help keep everything in place. Made of birch or maple with a UV clear-coat finish, they'll match any kitchen décor. The units glide on patented "tri-slides" minimizing any side-to-side motion and provide complete stability when pulled out of the cabinet. Door mounting is easy with the patented door-mount brackets, providing up to 5 inches of flexibility and micro door adjustments.

For more information on the Rev-a-Shelf line of cabinet organizers, contact www.rev-a-shelf.com. **EHT**

he Rev-A-Shelf products are extremely easy to assemble. In most instances all you'll need is a screwdriver.

Once assembled, installation is also easy with most Rev-A-Shelf products. In this case a pattern is fastened in place for the under-sink installation, and starter holes drilled for the holding screws.

Waste Organization made simple.

REV-A-MOTION
SOFT OPEN SOFT CLOSE

Gas Piston Technology

For smooth and sturdy motion.

REV-A-SHELF®

Visit www.rev-a-shelf.com for more information and to find a dealer near you!

Now Available in Bamboo!

For a more environmentally-friendly option.

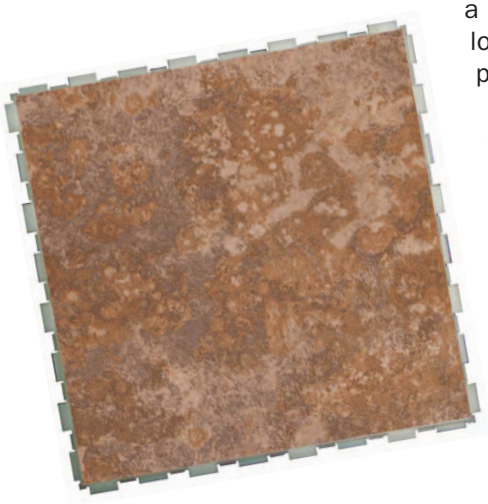
HEATED TILE

IN A SNAP

Install a snap-together porcelain tile floor with radiant heat—in a single weekend.

By Matt Weber

Remodeling a kitchen was only one part of the whole-house renovation my wife and I were undertaking. We wanted to make some significant upgrades, but were also pressed for time, staring down the barrel of dozens of projects to come. This played into our choice of materials. As long as we were covering the kitchen floor with tile, we thought it would be nice to add a radiant heat system, but needed a DIY-friendly setup that we could install quickly without a lot of major reconstruction. So we turned to a two-component system for do-it-yourself heated tile floors.



The first component is called QuietWarmth from MP Global Products, LLC. QuietWarmth is a system of low-profile, electric radiant heat underlayments. The underlayment mats line the floor and are butted at the seams to function like a hidden electric blanket beneath the tile. The mats replace typical floating floor underlayments, making the total overall thickness from subfloor to floor surface only around 3/8 inch. Quietwarmth not only deadens impact sound from the hard surface flooring, but it also makes the surface warm enough for bare feet, and assists with heating the room.

The second component is Avaire Interlocking Tile from CoMc, LLC. Avaire is genuine porcelain tile that is permanently attached to a non-skid, sound-deadening grid. This is a floating tile system, so no thinset or cement board is needed, which saves lots of labor. It installs directly over solid, flat subfloors, including vinyl, wood and concrete, and the rubberized grid absorbs minor imperfections in the surface. Even a first-timer can tile an entire room in a single day, because the tile simply

clicks together with a little help from a mallet and block.

PREP STEPS

As with any new floor system, take steps to prep your subfloor. Both QuietWarmth and Avaire can be installed on or below grade over most wood, vinyl, concrete and ceramic floors. The floor should be clean, smooth, dry and structurally sound before installing Avaire Tile. It must be flat within a tolerance of 1/4 inch in 10 feet. I used a straight-edge to test the evenness of the floor and was lucky enough not to find any problems. High spots should be sanded, and low spots should be filled using a cement-based leveling compound.

Next, remove any baseboard or shoe molding against the wall. Keep the trim intact and you can re-install it later. Or, like us, you can take the opportunity to upgrade to a different style.

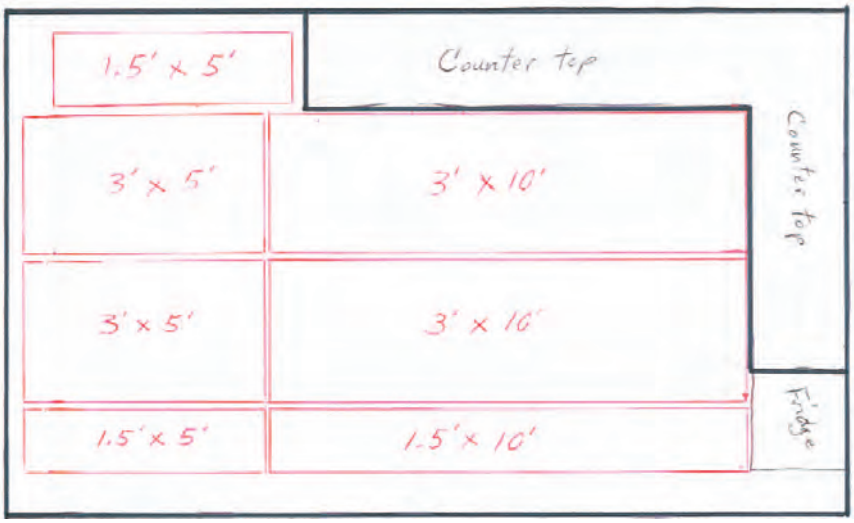
Also, take the opportunity to eliminate any squeaks in the floor. Use a stud finder to locate the floor joists and drive 3-1/2-inch screws through the subfloor into the framing to tighten any noisy areas.

ELECTRICAL ROUGH-IN

The next step in installation is readying your home electrical system. Although QuietWarmth radiant heat is intended for DIY installation, if you aren't well

versed in electrical work then consult a professional electrician to wire the system. In a nutshell, QuietWarmth operates from a thermostat with a built-in GFCI outlet (highly recommended). The thermostat includes a sensor wire that nests in the floor system to detect the temperature. Each heating mat has a pair of lead wires that run all the way to the thermostat (via a notched floor plate and conduit in the wall). And the thermostat controls it all.

When installing, follow all local building and electrical codes. While it is possible to branch the heat system from an existing circuit, the manufacturer advises against this. The size of the required power supply depends on the total square footage of heated padding. For example, one 3-by-10-foot panel requires 2.2 amps, one 3-by-5-foot panels require 1.1 amps, etc. The seven pads in my installation required 9 amps, so we installed a new dedicated 15-amp breaker for the heating system. We ran the power supply line from the breaker box, which happened to be located in the basement directly below the kitchen floor. Because everyone's wiring situation is likely to differ, I won't spend much

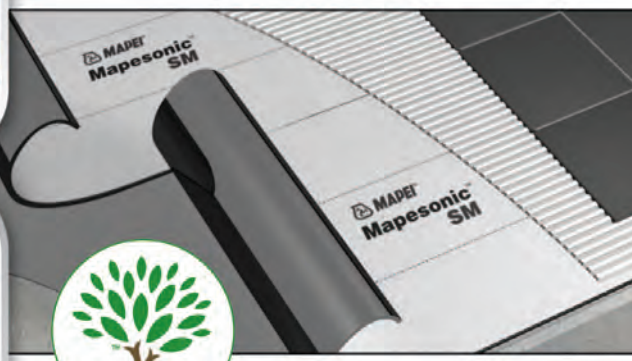


A sound investment for a sound environment

Mapesonic SM™

Sound-control and crack-isolation membrane

- ☑ Reduces transmission of airborne sounds: voices, radio, television and music
- ☑ Reduces transmission of impact sounds: footsteps, dropped items and moving furniture
- ☑ Prevents substrate cracks up to 3/8" (10 mm) from transmitting through mortar, tile or stone, and grout



GREEN INNOVATION

Mapesonic SM is developed with "green innovation" and is LEED-compliant, helping to contribute valuable points toward LEED-certified projects.

1-800-42-MAPEI (1-800-426-2734) • www.mapei.com

MAPEI®
TECHNOLOGY YOU CAN BUILD ON™

time on the specifics of wiring, but be prepared to drill some holes and fish some wire. Depending on the amperage requirements of multiple pads, a relay may be required. However, QuietWarmth does include detailed instructions as well as installation DVDs to help with the electrical work.

NOW YOU CAN JUST
CLICK IT!

The same great news and information found in our print editions is also available online.

VIEW OUR DIGITAL EDITIONS AT
www.ExtremeHowTo.com
AND CLICK ON "DIGITAL ISSUE"

Click to turn the pages of our latest edition and take advantage of the next generation of magazine delivery!

HEATING PAD PLACEMENT

Installing the QuietWarmth heating pads is a fairly straightforward procedure. Unroll the mats so the wires in the underlayment are facing upward. Arrange the pad so the lead wires run to the nearest wall with an electrical box (you'll make the connections later). Leave roughly 1 inch of floor space between the pads and the surrounding walls to have room to run the lead wires to the conduit. Tape the wires in place with thin strips of duct tape, and avoid running the lead wires over or under the mats. Also, avoid installing the heat

mats beneath cabinets, built-ins or any furniture with a solid base, because the excessive heat buildup could damage the elements.

Butt each successive pad against each other, being careful not to overlap the pads, which will result in an uneven surface for the tile to sit on. Seal the butted seams with duct tape, but be careful not to tape over the heating wires. Be sure to

use a utility-grade tape with an aggressive adhesive—Gorilla Tape, in our case. Never use staples on the QuietWarmth pads or wiring.

For areas where the heated pads are not installed, you'll need a filler material to keep the floor even for the tile. I cut multiple sheets of contractor paper to size to fill in the gaps. This was a real hassle and took more

time than I anticipated. If I were doing this again, I would use QuietWarmth's "Insulayment" product, which is a non-heated underlayment padding designed just for this job.

Once all the pads and wires are taped in place, you can then rout the thermostat's sensor wire about 6 to 12 inches into the underlayment, evenly spaced between two heating wires. It's okay to notch out a 1/4-by-1-inch

piece of padding to embed the sensor (but do not tape over the sensor probe).

PLANNING THE LAYOUT

Before placing the tile, check the surrounding door jambs and casings for the appropriate clearance. If there isn't enough room to accommodate the thickness of the tile, then you'll have to undercut the jambs. In such a case, use a scrap piece of tile to guide a powered jamb saw—or Japanese-style pull saw—and ensure proper door clearance.

The next step is to lay out your design. Avaíre tiles may be installed in straight, diagonal or staggered patterns. We settled with a straight pattern. I then measured the entire room from front to back, from left to right,

Families Have Saved Up To 50% On Heating Costs

And never have to buy fuel — oil, gas, kerosene, wood — ever again!

Lifetime Warranty

Your Benefits with Hydro-Sil:

- Slash heating cost with Hydro-Sil
- Furnace free – duct free
- Lifetime warranty. No service contracts
- Safe, complete peace of mind
- Clean, no fumes, environmentally safe
- U.L. listed
- Preassembled — ready to use
- Portable (110V) or permanent (220V)
- Whole house heating or single room

Contact us today for info and FREE catalog!

Hydro-Sil is a high performance individual room heating system that can save you hundreds of dollars in home heating costs by replacing old and inefficient heating. It can replace or supplement your electric heat, gas or oil furnace and woodstoves.

Hydro-Sil represents economy in heating: inside the heater is a sealed copper chamber filled with a harmless silicone fluid designed for heat retention qualities. The fluid is quickly heated by a varying amount of micro-managed proportional power. This exclusive technology greatly increases energy savings.

220 VOLT PERMANENT	Approx. Area to Heat	Discount Price	S&H	Qty.
8' 2000 w	250-300 sf	$319	$25	
6' 1500 w	180-250 sf	$289	$25	
5' 1250 w	130-180 sf	$259	$25	
4' 1000 w	100-130 sf	$239	$18	
3' 750 w	75-100 sf	$189	$18	
2' 500 w	50-75 sf	$169	$18	

Thermostats – Call for options & exact heater needed.

110 VOLT PORTABLES (Thermostat included.)	Discount Price	S&H	Qty.
5' Hydro-Max 750-1500 w	$229	$25	
3' 750 w – Silicone	$179	$18	
Heavy-Duty 240v	$329	$25	
Total Amount			

Check ■ MasterCard ■ Visa ■ Discover

1-800-627-9276

www.hydrosil.com

Hydro-Sil, P.O. Box 662, Fort Mill, SC 29715

Name_____
Address_____
City_____ St_____
Zip_____ Phone_____
MasterCard, Visa or Discover Account Information:
Acct #_____
Expiration Date_____

including the areas where the countertops encroach into the floor space. Divide these measurements by the exposed face of the 12-inch tiles. The idea is to plan your layout so you don't have a thin, awkward-looking tile along one edge of any wall.

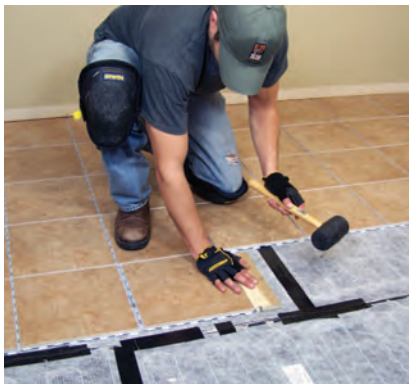
For example, if you start a row with a full tile at one end of a 10-foot, 4-inch wall, then you'll have enough room for 10 full tiles and a skinny tile at the end. If this is the case, then begin that row with a full tile in the center rather than end, working toward both walls. This will eliminate the single skinny end tile in favor of two larger cut tiles that will bookend the row. Take measurements in every direction and against every obstruction in the room, planning your layout accordingly.

LAYING THE TILE

Each tile is bordered on every side by plastic interlocking tabs that hook into the tabs of the mating tile. Align the tabs at the corner of each tile, and swing the tiles together so the remaining tabs "click" together in succession. The tile is non-directional, and can be installed to

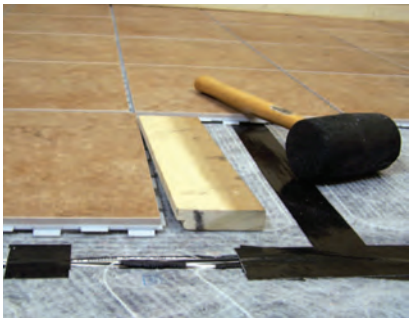
the right or left, but the interlocking tabs prevent inserting a tile between two tiles. Two great advantages of the tab system: Every grout joint is a uniform width, and the entire tile system stays square. Plus, because the Avaire tiles aren't permanently attached to the subfloor, the system resists cracking as the substructure shifts.

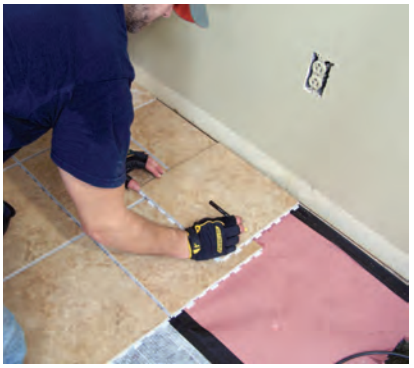
I found it easy to join the first edge of a tile by hand. But when interlocking the second edge of the tile with the tabs on an adjacent row, I needed a rubber mallet and tapping block for some extra encouragement. Be gentle when tapping the tiles into place. Place the tapping block squarely against the tile, never against the plastic tray. I made my block from a scrap of soft poplar, and cut a notch along its lower edge so the block met the porcelain clear of the plastic tabs.



You can install the tile one piece at a time, or row by row. You can also use the mallet and block to adjust the placement of a row once it has been interlocked.

You'll probably need to cut some tiles to fit along the ends





of the rows. For that you'll need a wet saw with a diamond blade. You can buy these at a hardware store, or rent one from most rental outlets. I borrowed one from my new neighbor, who happens to be a tile contractor (Thanks, Frank). Determine the size of the cut by laying a tile directly over the last full piece installed. Mark the lower piece using the top tabs of the tray as a guide, and cut along the line.

When placing a cut end tile against a wall, there is not enough room to tap it in with the mallet. In this case, carefully

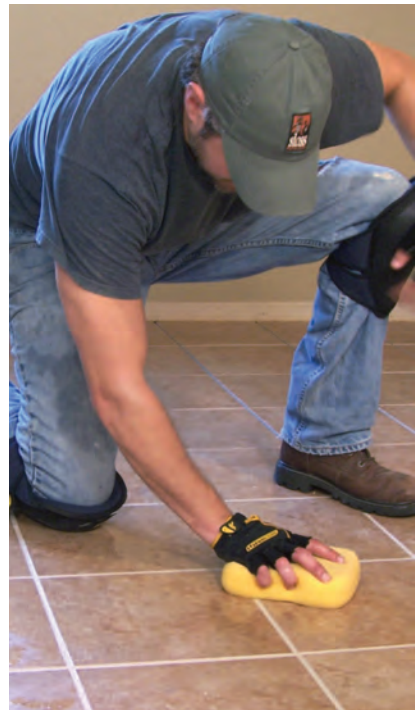
use a pry bar (preferably rubber-coated) to hook the edge of the tile and pull it away from the wall until the interlocking tabs snap together.

FLEXIBLE GROUT

The floating nature of the Avaire tile means the floor has some degree of flexibility. This being the case, using Avaire Flexible Grout is a critical part of installing the tile. No other grout should be used, because it will crack as the floor flexes. Flexible grout comes ready to use right out of the bucket. A 9-pound pail will cover approximately 50-65 square feet of 12-inch tile

Holding a sharp-edged, rubber grout float at a 45-degree angle, spread the grout diagonally, pressing it firmly to ensure the joints are filled completely. Then, holding the float at a 90-degree angle, pull diagonally across the joints to remove excess grout, using the edge like a squeegee. The angled stroke helps prevent the float from digging into the filled joints and pulling out the grout.

For best results, remove the grout haze as you work, using a sponge and a 5-gallon bucket of water. Just wipe up the grout



film, rinse the sponge clean, wring it until damp and repeat. Lightly work the sponge in a circular motion, loosening grout residue while making the joints smooth. Change the cleaning water often. Check the work as you clean, and repair any low spots with additional grout.

Protect the finished surface from traffic for at least 24 hours of drying, and then use a sponge and water to remove the final remaining grout haze. A complete cure requires 72 hours.

HYDE
Helpful Painting 'Tips'
Finish twice as fast using HYDE® Painter's Pyramids.®
• Nonstick tips allow you to paint all sides of your workpiece without the wait of drying time.
• Less mess and easy cleanup.
• Hold up to 200 pounds.
• Great for shutters, cabinet doors, furniture, crafts, molding and more.
www.hydetools.com
800-USA-HYDE
For a better finish, start with HYDE.™
©2008 Hyde Tools, Inc. All rights reserved. 15487

READY TO WARM

After installing your floor, use an ohmmeter to record the final resistance measurement of the QuietWarmth pads. The resistance should be within 10 percent of the factory recorded resistance. If not, call customer service (damage may have occurred during floor installation).

Route the lead elements up through the electrical conduit and into the 4-inch square thermostat box. Wire the leads in parallel (not series), black to black and white-to white. After all thermostatic controls are installed, power up the system to test the system's operation. All that's left is to enjoy the elegant appeal of genuine porcelain and the comfort of a heated floor. EHT

CROCODILE TAKES A BITE OUT OF TILE

For small cut-outs in tile, such as fitting pieces around a vent return, I used the new Crocodile Mini Saw from Clarke Power Products fitted with a diamond blade. This mini circular saw, in the shape of an angle grinder, has the ability to cut through a variety of materials—including genuine porcelain—by simply changing the 3-1/4-inch-diameter blade. The blade spins at 4,000 rpm, which is nearly twice as fast as the conventional circular saw. The Crocodile saw weighs only 4 pounds and has an adjustable depth of cut from zero to 1-1/16 inch. The Crocodile saw is bundled in a kit loaded in a multi-pocketed, soft-sided tool bag for storage. Included is a 24-inch laser level, wet/dry vac adapter, an auxiliary edge guide, a variety of blades and more. For more information on the Crocodile Circular saw, visit Clarke Power Products at www.clarkeusa.com.

GLADIATOR
GARAGEWORKS
BY WHIRLPOOL CORPORATION
Give Your Vehicle the Home It Deserves
Surround your vehicle in well-organized luxury. Gladiator® GarageWorks has revolutionized the garage, providing an organization system that keeps clutter hidden away behind strong, stylish steel cabinets, allowing your vehicle to be the center of attention it was meant to be.
GladiatorGW.com
IT'S TIME TO RETHINK THE GARAGE.®
*Registered trademark/™Trademark of Whirlpool, U.S.A. ©2008 Whirlpool Corporation. All rights reserved. Printed in the U.S.A. 8/08

STEP warmfloor™

...a step ahead

RADIANT FLOOR HEAT FOR EVERY RESIDENTIAL FLOOR SURFACE

STEP Warmfloor™ Unique Product Characteristics

- > Total heating and floor warming
- > Safe, self-regulating, will not overheat
- > Material truly acts as its own floor sensor
- > Low-voltage (24V, AC or DC)
- > Virtually maintenance-free
- > Compatible with most floor coverings
- > Perfect for new construction or remodeling
- > Easy to install
- > Can be conveniently installed between exposed joist systems
- > Low power consumption results in energy savings
- > ETL approved and complies to ANSI/UL-1693
- > Patented technology

877-783-7832

www.warmfloor.com

ISO 9001 : 2000

CFI CERTIFIED INSTALLER

HBA HOME BUILDERS ASSOCIATION

RPA RADIANT PANEL ASSOCIATION

INTERTEK ETL LISTED US 9700143

CE

Manufactured by Electro Plastics, Inc.
St. Louis, Missouri, USA

BATHROOM

Here's a case study of a bathroom remodel from re-caulking to radiant heat floors.

By Monte Burch

REDO

This 30-year-old bathroom had typical problems—old, rotted window, hardened bathtub caulk and an inefficient and dangerous space heater.

The bathroom shown had the typical problems of a construction about 30 years old. The window was located too low and rotted out from water damage from the shower. It was also an older, inefficient window. The tile around the tub and shower area was in good shape, but needed regrouting and recaulking. An old, inefficient space heater was located in one wall. Replacing the window, regrouting and recaulking the tub, new wallpaper, and replacing the heater with STEP Warmfloor radiant floor heating under ceramic tile made the bathroom more energy efficient as well as more attractive.

HELP FROM NEW MATERIALS

First step was to replace the old window. A much more energy-efficient, solid vinyl window was chosen. The new, smaller, side-sliding window was also located higher to avoid water damage from the shower.

Framing in the window was a basic carpentry job, although it did leave an opening on the bottom on both the outside and inside walls. In this case, however, the house was also being resided, so the outside finish work was fairly simple. Sheathing was added, then the house resided, including the area below the new-construction style window. The opening below the window on the inside was covered with drywall. The bathroom had damaged drywall, and new drywall was also added in these areas.

Several new products were used in the drywall installation. C.H. Hanson's Speedrocker allows you to carry three drywall tools in one. The utility knife is not only comfortable to use, but has a slot in the handle. Insert the end of a tape measure in the slot and hold the tape measure against the dry-

BATHROOM REDO

First step was to remove the old wallpaper.

A new window was installed and tile removed from around the old window.

The area below the new window was framed in.

The opening is filled with insulation.

New drywall is installed over the insulation.

C.H. Hanson Speedrocker is a dual-purpose drywall tool, with a blade for cutting.

A fold-out saw cuts out electrical box holes.

Self-adhesive E-Z Tape joint tape makes it easy to cover the joints.

wall edge at the width needed to make a measured cut. The tool also has a jab saw in the handle—merely pull out the saw to make cutouts for electrical boxes. One side of the handle also has a rasp that can be used to smooth up cuts. A Blind Mark magnetic marking device was used to mark the cutouts for electrical boxes.

The joints of the drywall were taped using E-Z Stick drywall tape, a definite advance in joint taping. Old-fashioned tape requires applying a coat of joint compound, then pressing the tape in place and applying joint compound over the tape. Mesh, adhesive tape is available, but it requires more joint compound and effort in covering. E-Z Stick tape is self-adhesive. Cut off a strip of Finishing Tape sufficient to cover the drywall seam. Dip the strip in water just long enough to wet both sides of the tape, and then quickly remove it from the water. Place the wet strip over the drywall seam. Smooth the wet tape in place with a trowel or 6-inch drywall knife to remove excess water. Allow 10 to 15 minutes for the tape to dry before applying drywall compound. Wet the tape with a sponge if you need to reposition it, although this can cause some damage to the drywall surface.

Going “green” with the drywall, we used LaFarge Rapid Coat Low Dust all-purpose joint compound to seal the joints and fill over drywall fasteners. This product creates less airborne dust during the sanding process, so it’s not only less messy, but easier on the applicator. Also, I found it to be extremely adhesive and easier to work with than some other drywall joint compounds.

Blind Mark uses magnets inside electrical boxes and on drywall to quickly and precisely mark for openings.

LaFarge joint compound creates less airborne dust during the sanding process.

The window trim is painted and then installed with an air nailer.

The Bosch cordless miter saw makes it easy to do job-site chores such as cutting window trim.

A mini compressor is easy to tote to the job site for driving air fasteners.

Tile to match old tile is installed around the window.

The new tile is then grouted.

DAP KWIK Seal 3.0 Kitchen and Bath Adhesive is applied around the window, the old caulk removed from tub and tile, and then recaulked.

STICKY ASS GLUE
STUBBORNLY STRONG!

The only thing worse

than finding yourself in an EXTREMELY sticky DIY situation....

Is finding yourself in an

EXTREMELY Un-Sticky DIY situation.

THAT'S WHERE WE COME IN!

Bonds Great. Less Foam.

www.stickyassglue.com
Tel: (877) 845-8530
Fax: (626) 698-0668
glue@stickyassglue.com

Proud Member of the WORLDWIDE DO-IT-YOURSELF COUNCIL

100% Waterproof! Made in the U.S.A!

CUSTOM MAGAZINE RACK

The opening in the wall for the old space heater was filled in with a shop-made toilet-paper/magazine rack. The rack was constructed of pine 1-by-12's. First step was to build the frame to fit between the wall studs. A 1/4-inch plywood back was added, fastening all together with Titebond II glue and staples driven with an air fastener. A lip was created around the outside edge with decorative routed edges on the lip strips. The lip strips were fastened in place with finish nails, their heads set and the holes filled with wood filler. An inexpensive toilet paper holder was purchased, and the support rod used in the rack.

The 3/8-inch deep holes were bored in one side of the rack and in a second support piece, using a portable electric drill and forstner bit. The horizontal divider was installed using finish nails through the sides into the ends of the divider. Then the vertical support piece fastened in place, again with finish nails. Finally, the magazine support strips were fastened to the outside lip pieces, again using No. 6 finish nails with their heads set below the surface and filled with wood putty.

Incidentally, if you desire to stain and finish the rack, as was done on the rack shown, it's easier to apply finish before the interior support strips are installed. Cut the support strips, and apply

Shown is the opening from the old space heater.

A shop-built toilet-paper holder/magazine rack was made and installed.

New wallpaper was added and a thermostat for STEP Warmfloor radiant heating element installed.

BoWrench®
Deck Tool
by Cepco Tool Company
The only 1-MAN, HANDS FREE, Self-Locking device for bending warped boards and installing tongue & groove materials!
"an exceptionally handy tool!"
Herrick Kimball, Fine Homebuilding
SIMPLE & RUGGED
INSUL-KNIFE®
Multi Purpose Insulation Knife
CEPCO TOOL COMPANY
800-466-9626 www.cepcotool.com

DOVETAIL DRAWERS

THE GREAT -
WESTERN DOVETAIL
INCORPORATED ™

ORIGINATORS AND PRESENTERS OF
THE MOST AMAZING DOVETAIL DRAWERS IN THE WORLD

CURVES AND CORNERS DOVETAILED AT ANY ANGLE

THE BEST IN THE WEST!

5-7 Day Lead Time - No Minimum - Competitive Pricing - Excellent Customer Service - Highest Quality
www.drawer.com - 1-800-800-DOVE - Fax: 707-556-1920 - Mail: PO BOX 2035, Vallejo, CA 94592

finish to them as well before installing. The rack is held in place by anchoring into the studs with self-tapping wood screws.

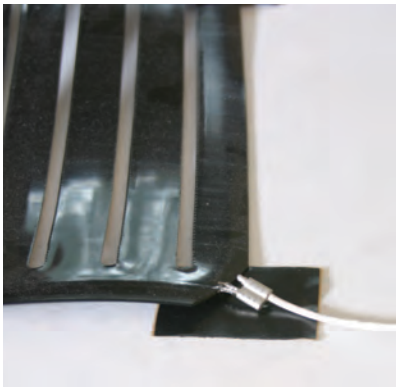
With the area below the old window sealed, new tile was added to match the existing tile. MAPEI Type I adhesive adhered the tile in place. The area sur-

The hole was bored through the wall into the adjoining closet for running the heat element wires to a transformer.

The transformer was located in the closet on a shelf.

The corners are snipped off the heating elements to expose wire braids. The element wire is then crimped to the braids using a crimper tool supplied with the kit.

The crimps are then protected with supplied rubber tape.

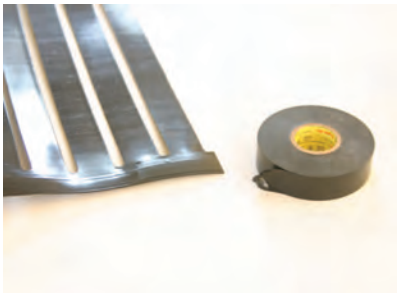


GROUT GETTER CO.
The original Grout Getter
RIP OUT THE GROUT!
GROUTGETTER
CORNER PRO
Used by Tile Setters Nationwide!
Solid Carbide Blades
Grout removal just got easier and faster with the new patent pending CORNER PRO.
Developed to assist the GROUT GETTER in ripping grout out of corners, curves, edges and hard to get areas, this tool combo does it all!
• Rips out grout and caulking
• Scrape out thinset before grouting
• Scrape mortar for proper fit of tile and liners
• Score cement backerboards
• Scribe lines on tile and stone for saw cutting
Visit us at:
www.groutgetter.com
1-877-734-7688
Tile & Hardware Dealers Welcome
The Original
GROUT REMOVAL KIT
RIP OUT THE GROUT!
QUICKLY REMOVE GROUT & CAULKING FROM:
NEW! Stay Tight Hexagon Shaft
NEW! Soft Grip Handle

rounding the old space heater was also tiled to match the existing tile. The remaining old wallpaper was removed and new wallpaper hung.

CAULK RX

The next problem to address was the old bathtub caulk. Discolored, cracked and peeling in several places, it was completely removed using a sharp utility knife to cut it away from the wall tile and tub. Then a flat chisel was used to pry it off. The area was cleaned thoroughly,



Electrical tape is used on the exposed ends of the element braids.

The elements are positioned in place, then stapled to the subfloor.

and then recaulked using another "green" product, DAP Kwik Seal 3.0 Advanced Kitchen and Bath Adhesive Caulk with Kwik Dry technology. This new sealant allows it to be exposed to water and moisture after only three hours without washing out. This

The elements are then embedded in MAPEI Dust-Free Ultraflex 2 tile mortar.

Cement board is installed over the wet mortar, fastening on marked lines to prevent fastening through the braids or extension wires of the elements.

means you can caulk and shower in three hours, or even caulk and paint in three hours—no more waiting around. Another benefit is the addition of Microban Antimicrobial Product Protection that fights the growth of bacteria, mold and mildew that causes odors, stains and degradation of the caulk. Also, the product is paintable and has low odor and low VOC content for improved indoor air quality. I found it extremely easy to apply, with great adhesion.

WARM FEET

One of the major improvements was installation of STEP Warmfloor radiant floor heating under the ceramic floor tile. Not only more efficient than the old

Homelite®

MIGHTY Lite

2-Cycle
Gas Blower
and Blower/Vac

MORE POWER…
LESS WEIGHT

Hand held Blower
$69.97
7.9 lbs/ 170 MPH

Hand Held Blower/Vac
$89.90
9 lbs/ 200 MPH

The Homelite Gas Powered Mightylite™Blower and Blower /Vac are the lightest on the market. But start 'em up and they deliver the wind speed of a category 5 hurricane to help you blow through clean-up chores in record time. They start fast, run clean, and their prices are as light as their weight.

New Homelite Mightylite. More Wind. Less Weight.

Available at
The Home Depot

space heater, the radiant flooring is also more user friendly, safer and eliminates dust and other particles. STEP Warmfloor radiant floor heating is available in easy-to-install kits, with everything you need for installation, including: the heating elements, a 24-volt transformer, terminal board, connector kit and the connecting wires needed. On small rooms, you may wish to install only an off-on switch, but a thermostat is the best choice. Residential kits can be used for all flooring applications (including tile, stone, resilient hardwood, carpet and so forth). The company makes it extremely easy to design and lay out your floor. Their website has a work sheet, which you fill out with the details of the room, with information as to size of the room, number of windows, type of construction, type of floor support, type of finished floor and the amount of thermal insulation available. Also included is a squared drawing so you can sketch in room dimensions. Your kit includes a flooring layout diagram as well as full instructions.

It's important to make sure the installation conforms to local building codes, ordinances and trade practices. First step is to design the layout and calculate the materials needed for the job. Do not place heating elements under base cabinets, fixtures and appliances. Minimum distance between elements and from plumbing fixtures is 2 inches. Performance of the kits depends on the amount of thermal insulation under the elements. It is required to insulate the floor beneath the element or between the floor joists.

Once the layout is designed, use scissors to cut the element into the sizes needed. Then determine the extension wire connection locations. They can be connected to the element on the floor, up the wall, under the baseboard, or below the subfloor in a basement, ceiling or crawlspace. The extension wires run from the elements to terminal boards and then to a transformer. The transformer must be installed in a well-ventilated and accessible area and wired in

EASY-TO-INSTALL BATHROOM HEAT AND LIGHTING

Upgrading a bathroom? Consider the Enerjoy PeopleHeater Bathroom Comfort Center, which focuses gentle sunlike radiant warmth on people and objects. Each Comfort Center contains all the components necessary to provide and control bathroom heat, room light, night light, exhaust and ventilation. Much like a microwave oven, the ceiling-mounted Enerjoy Heatmodules safely transfer radiant energy to the cooler floor, walls, windows and people, which reradiate heat that warms the air. Centered in the multiple-sized Heatmodule is the combination fan, light and night-light. The single, compact Comfort Center can easily be installed in new or existing bathrooms in all types of buildings. The Comfort Center provides an economical, quiet, easy-to-control heating and ventilating system for total bathroom comfort. The design allows for economical use of ceiling space, as well as wall space for the controls. Plus, the Comfort Center is as easy to install as electric lighting, with the Heatmodule covering whatever ceiling alteration occurs during new or retrofit installation. The complete Comfort Center ranges in price from $349 to $499, depending on sizing and features desired. Learn more at www.sshcinc.com or call 1-800-544-5182.

accordance with the National Electrical Code. In this case the transformer and terminal board was located in a closet adjoining the bathroom. The wiring for the old space heater was connected to a thermostat in the bath and the wiring was run through the wall to the transformer.

With the elements and wire connection locations determined, expose the two longitudinal wires by cutting the plastic on each side of the longitudinal bus braids. Or, make a score in the plastic front and back with a knife. Bend the element where the cut is made and pull off the corners to remove the surplus plastic. Make sure you do not cut or damage the braided wire. The extension wires are connected to the bus braid with the tinned copper connectors using a crimping tool supplied with the kit. Make sure the wires and braids are securely fastened. Give a light tug after crimping to make sure none are loose. I discovered a loose crimp just as I was about to embed the element. Sealant tape is then cut and folded and pressed together to overlap the element corner, connector and wire splice to form a flat and smooth splice.

Stretch each element firmly in position and attach to the subfloor with staples or tape, or spot with hot glue. Do not puncture the bus braids on each side of the element. Do not use adhesive to glue down the element (other than a latex modified mortar). Do not place the elements in direct contact with any conductive material or in indirect contact through metal fasteners.

Connect each element in parallel to the terminal boards with the extension wires, and the bus board to the transformer. The heating elements and wiring must be measured and checked by a certified electrician before being covered.

The last step is to cover with your chosen flooring. Level the floor using the proper mortar, underlayment or cement backer boards. Do not place a conductive material or aggressive adhesive in direct contact with the heating elements. In the case shown, the elements were embedded in MAPEI Dust Free Ultraflex 2 tile mortar with polymer. Cement board was applied, first marking fastener location lines so no fasteners would penetrate the wiring. The tile mortar was then applied to the cement board and ceramic floor tile installed and grouted. **EHT**

The ceramic tile is applied and grouted over the heating mats.

Don't Just Move Leaves, Mulch Them Too!

Homelite®

MIGHTY Lite

Blower/Vac/Mulcher

Get 3-in-1 Versatility

✔ AS A BLOWER:
200 MPH Air Speed

✔ AS A VACUUM:
Suck Up Damp Leaves Too!

✔ AS A MULCHER:
Steel Blade Impeller
Bags Debris In 12:1 Ratio

Value Priced $89.90

Also Uses NEW 2-Cycle G-Oil®
The Ultimate Biodegradable Oil!

Exclusively at The Home Depot

CHRISTMAS PRESENTS

YOU CAN BUILD

Create your own gifts with a personal touch.

Making Christmas presents in your shop for family and friends triples the fun. You have the pleasure of woodworking and the pleasure of giving hand-made gifts, and the receiver will appreciate the thought and effort that goes into a hand-made object. If you're into making a little money with your shop, these "gifts" also make great projects to sell at craft shows and fairs. Following are gifts for young and old, male and female.

By Monte Burch

Grizzly Industrial®

PURVEYORS OF FINE MACHINERY®, SINCE 1983!

LAST CHANCE AT THESE PRICES! DON'T DELAY, CALL TODAY!

10" Contractor Style Table Saw *w/Riving Knife*

Added features improve a customer favorite!

New!

- Motor: 2 HP, 110V/220V, single-phase
- Precision ground cast iron table w/wings
- Table size: 27" x 44"
- Arbor: 5/8"
- Arbor speed: 4200 RPM
- Cutting capacity:
  3⅛" @ 90°
  2⅛" @ 45°
- Rip capacity: 36" L, 12" R
- Approx. shipping weight: 443 lbs.

Riving Knife, Cast Iron Trunnions & Dust Hood

INCLUDES CAST IRON MITER GAUGE W/SIDE PLAY ADJUSTMENT

See it on Page 17 of the 2008 Catalog.

G0661

INTRODUCTORY PRICE $725.00

$89 Anywhere in Lower 48 States

6" Jointer *w/Mobile Base*

Full featured with tons of extras at an amazing price!

New!

- Motor: 1 HP, 110V, single-phase
- Precision ground cast iron table
- Table size: 7½" x 46"
- Max. depth of cut: ⅛"
- Max. rabbeting capacity: ½"
- Cutterhead knives: 3 HSS
- Cutterhead dia.: 2½"
- Fence size: 4½" H x 29⅜" L
- 4" dust hood
- Approx. shipping weight: 240 lbs.

Built-in Push Block Shelf

INCLUDES FREE SAFETY PUSH BLOCKS

BUILT-IN MOBILE BASE

See it on Page 37 of the 2008 Catalog.

G0654

INTRODUCTORY PRICE $335.00

$69 Anywhere in Lower 48 States

Benchtop Mortising Machine

New!

- Motor: ½ HP, 110V, single-phase, 1750 RPM
- Cast iron construction
- Table size: 12½" x 12¼"
- Max. mortising depth: 3"
- Max. chisel travel: 4⅝"
- Spindle taper: JT#2
- Spindle travel: 3¼"
- Chuck size: ⅜"
- Overall height: 32"
- Approx. shipping weight: 73 lbs.

RACK & PINION HEAD CONTROL WITH PNEUMATIC STRUT RETURN

INCLUDES 4 MORTISING CHISELS!

G0645

INTRODUCTORY PRICE $185.00

$39 Anywhere in Lower 48 States

1 HP Dust Collector

- Motor: 1 HP, 110V/220V, single-phase
- Air suction capacity: 630 CFM w/elbow, 800 CFM w/o elbow
- Static pressure: 3.3"
- Lower bag capacity: 2.1 cu. ft.
- Impeller: 9" balanced steel, radial fin
- Portable base size: 15¼" x 26"
- Overall height: 59"
- Approx. shipping weight: 73 lbs.

TURN TOP HANDLE TO CLEAN THE CANISTER FILTER

G0583 ~~$350.00~~

ONLY $325.00

$69 Anywhere in Lower 48 States

1½ HP Shaper

VISIT GRIZZLY.COM FOR OUR IMPRESSIVE SELECTION OF SHAPER CUTTERS!

- Motor: 1½ HP, 110V/220V, single-phase
- Precision ground cast iron table
- Table size: 20¼" x 18"
- Spindle travel: 3"
- Spindle speeds: 7000 & 10,000 RPM
- 2 interchangeable spindles: ½" & ¾"
- Max. cutter diameter: 5"
- Approx. shipping weight: 221 lbs.

INCLUDES CAST IRON MITER GAUGE & FENCE W/ HOLD-DOWN SPRINGS

G1035 ~~$515.00~~

ONLY $495.00

$69 Anywhere in Lower 48 States

Shown w/Optional G1706 Wing Attached

The Ultimate 14" Bandsaw

- Motor: 1 HP, 110V/220V, single-phase, TEFC, 1725 RPM
- Precision ground cast iron table size: 14" sq.
  - Table tilt: 45° R, 10° L
  - Max. cutting height: 6"
  - Cutting capacity/throat: 13½"
  - Blade size: 92½" - 93½" (⅛" - ¾" wide)
  - Blade speed: 1500 & 3200 FPM
- Approx. shipping weight: 198 lbs.

INCLUDES QUICK BLADE RELEASE SYSTEM, FENCE & MITER GAUGE

MADE IN ISO 9001 FACTORY

G0555 ~~$435.00~~

ONLY $395.00

$69 Anywhere in Lower 48 States

15" Planer

- Motor: 3 HP, 220V, single-phase
- Precision ground cast iron table size: 15" x 20"
- Max. cutting height: 8"
- Max. cutting depth: ⅛"
- Min. stock thickness: 3/16"
- Cutterhead knives: 3 HSS
- Cutterhead dia.: 3"
- Cutterhead speed: 5000 RPM
- Feed rate: 16 & 30 FPM
- Approx. shipping weight: 675 lbs.

PRECISION GROUND CAST IRON BED & INFEED OUTFEED TABLES

BUILT-IN MOBILE BASE

G0453 ~~$825.00~~

ONLY $795.00

$139 Anywhere in Lower 48 States

18" Open-End Drum Sander

- Motor: 1½ HP, 110V, single-phase
- Conveyor feed rate: variable, 2-12 FPM
- Drum surface speed: 4000 FPM
- Max. stock size: 36" wide x 4½" thick
- Min. board thickness: ⅛"
- Min. board length: 6"
- Sanding drum size: 4"
- Dust port: 2¼"
- Approx. shipping weight: 350 lbs.

SANDS BOARDS UP TO 36" WIDE!

INDEPENDENT DUST COLLECTION W/DUST BAG

G0458

ONLY $850.00

$69 Anywhere in Lower 48 States

10" Wet Grinder Kit - 90 RPM

New!

The durable 2" wide x 10" dia., 220 grit grinding wheel runs in a water bath to keep tools cool while sharpening. The 1¼" wide leather stropping wheel hones to a final razor edge.

INCLUDES UNIVERSAL JIG, ANGLE GUIDE & POLISHING/HONING PASTE

MADE IN GERMANY

T10010

VISIT GRIZZLY.COM FOR OPTIONAL ACCESSORIES

INTRODUCTORY PRICE $169.95

3-Pc. Framing/Brad/Palm Nailer Kit

New!

H8235

ONLY $179.95

Framing Nailer:

- Shoots 21° full round stick nails
- Accepts 2"- 3½" nail lengths
- 80 nail capacity

Brad Nailer:

- Shoots 18 gauge brad nails
- Accepts ⅝"- 2" brad lengths
- 100 brad capacity

Palm Nailer:

- Drives single common nails in close quarters

Flooring Stapler

- Adjustable pneumatic control
- Uses ½" crown staples
- Extended handle & oversized base plate
- Dual purpose hammer/mallet drives floor tight & actuates stapler
- Shoots fasteners from 1"- 2" long
- Operating pressure: 70-110 PSI
- 60 staple magazine

H5977 ONLY $195.00

MasterCard VISA Discover American Express BillMeLater

PRICING CODE 08EXTREME

MENTION THIS CODE WHEN PLACING YOUR ORDER

TECHNICAL SERVICE: 570-546-9663
FAX: 800-438-5901

FREE CATALOG
OVER 12,000 PRODUCTS ONLINE!

1-800-523-4777

grizzly.com

FULL YEAR WARRANTY GRIZZLY Power Tools & Machinery

3 GREAT SHOWROOMS!
BELLINGHAM, WA
MUNCY, PA
SPRINGFIELD, MO

10273R

HEART JEWELRY BOX

Any lady, young or old, will appreciate this heartfelt gift. Although it looks simple, the box takes a bit of expertise. The box shown was made of walnut, but any tight-grained hardwood will work. The body of the box is made of 1-1/2-inch thick material. Bowl-turning squares, or blocks in the size shown, are available from a number of mail-order companies. You will also need 3/4-inch thick pieces for the top and bottom.

The box is actually assembled from three pieces; a body, bottom and top. The first step is to enlarge the squared drawing and make a pattern for both the inside and outside of the box. The pattern for the outside will also be used for the bottom and top. Mark both the inside and outside cuts on the wood blank and cut the inside first. Make starting holes at the top and bottom of the profile, and use a jigsaw with a long blade to make the cut-out. Rasp or sand as needed. Once the inside is cut, cut the outside using a bandsaw or a jigsaw with the stock clamped to the edge of a workbench or other solid surface. Sand the outside of the box smooth, then use it as a pattern to create the bottom. Cut the bottom piece to shape and sand smooth. Glue the bottom in place and again sand the outside edges smooth.

The inside profile is cut first, using a drill bit to create starting holes. Then a jigsaw is used to make the cut-out.

Use the glued-up box to mark a pattern for the top. Remember to turn the box upside down on the top piece and mark the bottom side of the piece. Rout the top of the lid using a router in a router table to create a rounded profile. Apply finish to both the inside and outside of the box, as well as to the lid. Three coats of semi-gloss polyurethane were applied to the box shown, smoothing with steel wool between coats. The inside should have felt applied. Felt, available in craft stores, is cut to fit and glued in place using craft glue.

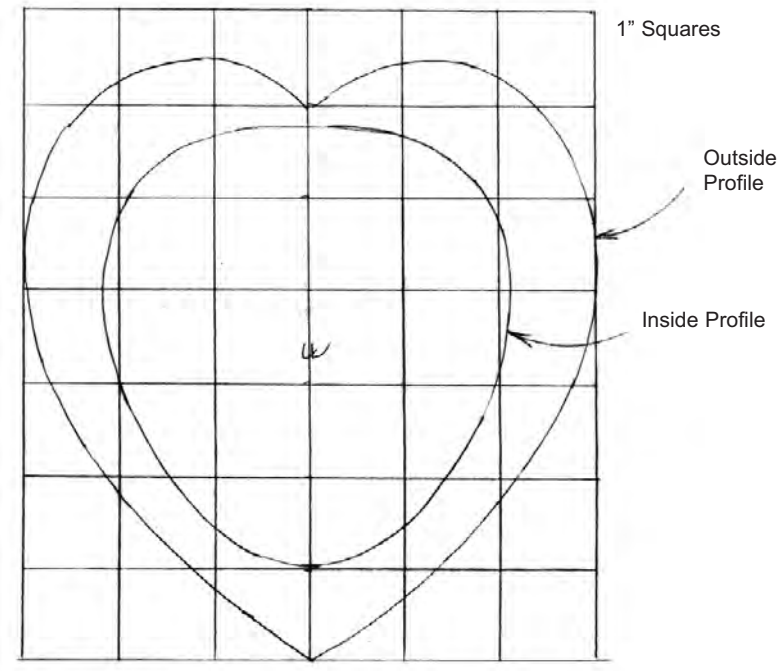
A spindle shaper smoothes the inside.

An alternative method, and somewhat easier, especially if you're building more than one box, is to use spray-on flocking. Available in a kit, the adhesive is applied, and then the powdered flocking. Once the inside has been covered, mortise tiny brass hinges in place on the back of the box and lid.

MATERIALS LIST

BODY, 1-1/2 X 6 X 6-1/2"
BOTTOM, 3/4 X 6 X 6-1/2"
LID, 3/4 X 6 X 6-1/2"

Heart Box



SHADOW BOX

One of the simplest projects, but well appreciated by "collectors" is a shadow box. Shown are a couple of examples, but you can vary the sizes and dividers to suit a particular collection. The walnut box is assembled from 1/2-inch stock, has an open back and is the easiest to build. It can be hung vertical or horizontal, depending on the collectibles. First step is to plane the stock to thickness, or purchase 1/2-inch stock. Rip the stock to width and joint both edges. The box is glued together using half-lap and dado joints for strength. The joints can be cut by hand using a backsaw and chisel, or cut with a dado head. Apply TiteBond glue to the joints and clamp the assembly together all at one time. Make sure the assembly is square, then clean off all excess glue with a damp rag, paying special attention to the inside corners. Once the glue has dried, sand all surfaces and apply finish. Again, polyurethane was used. Attach picture-frame hangers to the back. You'll need one for a vertical and two for a horizontal hanging.

MATERIALS LIST

TOP AND BOTTOM, 1/2 X 3 X 18", 2 REQ'D.
SIDES, 1/2 X 3 X 10-1/2", 2 REQ'D.

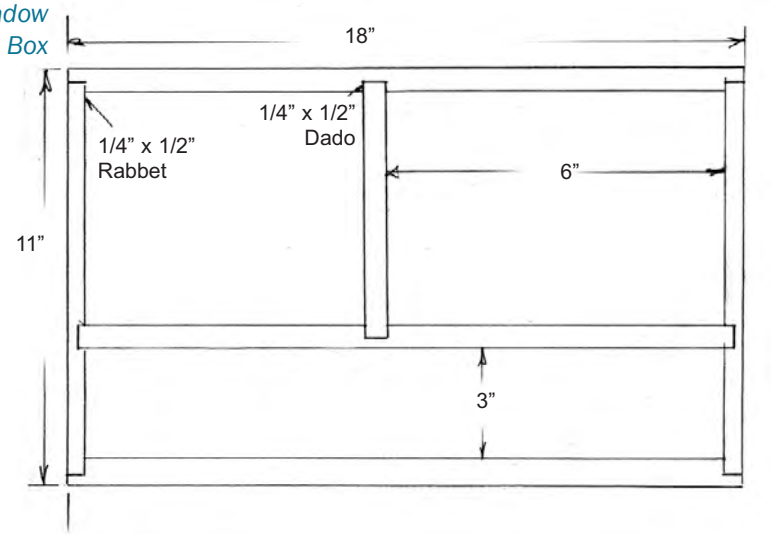
HORIZONTAL DIVIDER, 1/2 X 3 X 17-1/2", 1 REQ'D.

VERTICAL DIVIDER, 1/2 X 3 X 6", 1 REQ'D.

DRAWER-BOX

One neat way of creating a shadow box is to install dividers in an old drawer, recycling it into a wall hanging. The box shown is actually assembled to look like a drawer, and standard drawer construction is used for the "box." First step is to rip the pieces to the correct width and joint or sand all edges smooth. Note the sides are 1/2-inch, and the front or "top" is 3/4 inch. Cut 1/4-by-1/4-inch dadoes, up 1/4-inch from the bottom edge in the front (top) and sides to accept a 1/4-inch back. Cut a back piece of 1/4-inch stock to size and cut a drawer back (box bottom) to size. Fasten the drawer front and back to the sides with glue and brads. Slide the drawer bottom in place, use a carpenter's square to make sure the box is square, then fasten the 1/4-inch bottom to the back with brads. Now you have a basic drawer. Cut the dividers as desired and hot-glue them in place. Then add strength by driving brads in from the back

Shadow Box



into the dividers. Sand and finish, then add a drawer knob and hanger.

MATERIALS LIST

TOP, 3/4 X 2 X 8", 1 REQ'D.

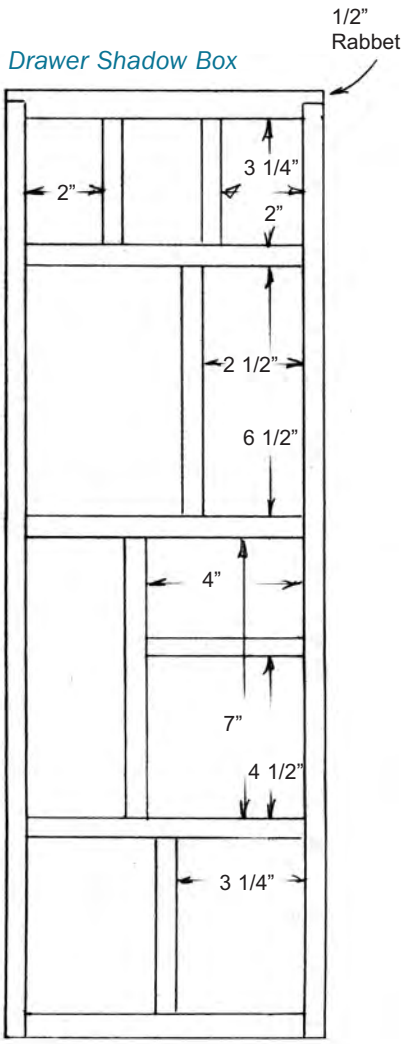
BOTTOM, 1/2 X 1-1/2 X 7", 1 REQ'D.

SIDES, 1/2 X 2 X 23-3/4", 2 REQ'D.

BACK, 1/4 X 7-1/2 X 23-3/4", 1 REQ'D

DIVIDERS, 1/2 X 2 X 60", CUT TO FIT

Drawer Shadow Box



SERVING TRAY

A decorative serving tray is another handy and attractive gift. The tray shown is uniquely assembled from both walnut and red oak, using screws and walnut plugs over the screws as a decorative touch. The entire tray is assembled from 1/2-inch stock.

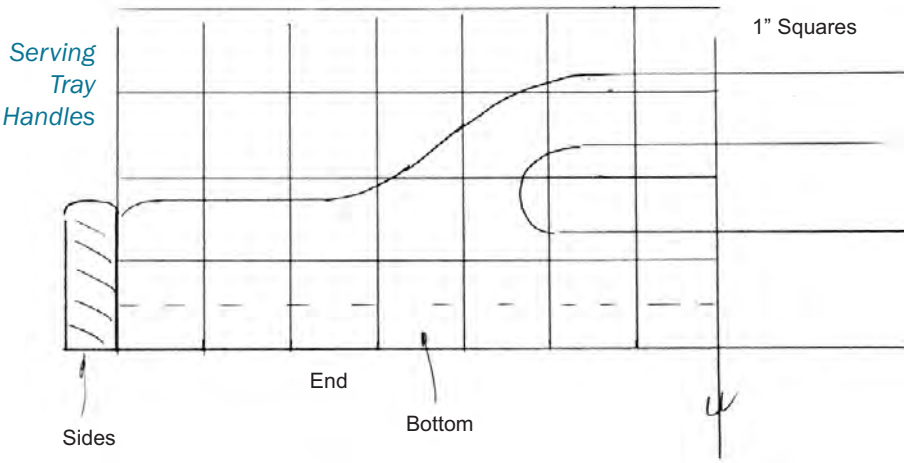
The first step is to plane the stock to the correct width using a surface planer. The bottom is assembled using biscuits and TiteBond II waterproof glue. Cut the biscuit slots, and then glue the assembly together, making sure it is clamped squarely and not warped. Once the glue has dried, belt-sand the joints smooth and cut the ends square.

Enlarge the squared drawing for the ends and bandsaw their top edges to shape. Mark the cut-outs for the handles. Bore starting holes in each end of the handle holes, and then make the cuts with a jigsaw. Sand all edges smooth, and round the inside of the handles and the top edges with a router. Attach the end pieces to the bottom by first locating the screw holes. Use a forstner bit to countersink 1/4-inch deep for the wood plugs, and then use a 1/8-inch drill bit to drill through the holes. Apply TiteBond II glue to the bottom ends and clamp them in place. Drill starter holes through the end screw holes into the bottom

Stock is run down to 1/2" thick on a planer, then glued and clamped together using Titebond II waterproof glue.

ends, and then drive screws in place. Cut the sides and attach to the sides of the bottom in the same manner. Attach the upper ends of the sides to the upper ends of the end pieces. Wipe

Serving Tray Handles



The surfaces are belt-sanded flat and smooth.

The ends and hand holes are cut to shape, then sanded smooth with a spindle sander.

away all excess glue and allow the glue to set.

Using a plug cutter in a drill press, cut the walnut plugs. Glue the plugs in place in the holes and sand their tops flush with the surrounding wood surfaces. Sand the entire tray thoroughly, and then apply salad bowl finish.

MATERIALS LIST
BOTTOM, 1/2 X 14 X 18", 1 REQ'D.

ENDS, 1/2 X 3-1/4 X 14", 2 REQ'D.

SIDES, 1/2 X 1-3/4 X 18", 2 REQ'D.

BASKET BENCH

The storage bench shown utilizes a pair of baskets for storage and offers seating as well. Although a larger project, it is one of the simplest and came about when my wife Joan admired a similar piece in a furniture store as an end-of-the-bed bench. I modified the design somewhat to suit the bedroom. The bench can also be used in just about any other room, providing seating and storage for any number of items.

The first step is to acquire the baskets so you can size the bench to the baskets. The bench is made from stock 1-by-12 shelving material found at our local Lowe's store. The biggest chore is gluing up the wide pieces for the top, bottom and sides. Again, a biscuit joiner and biscuits were used for this chore. A full-width piece and a piece ripped to size were used for creating the wide pieces. After ripping the narrow pieces all edges are smoothed on a jointer. Then the wide stock is glued up and clamped. It's extremely important to make sure the stock is not warped during the clamping steps. Once the glue has dried, the surfaces are belt-sanded to smooth the joints, then sanded with progressively finer grits of sandpaper. Cut rabbets in the back inside edges of the sides and top for the 1/4-inch back.

The bench is made from stock 1 x 12 pine shelving, using a biscuit joiner and gluing up the wide pieces with biscuits.

Make sure the pieces are clamped square and flat.

After the glue has set, the pieces are sanded smooth with a belt sander, followed by an orbital sander.

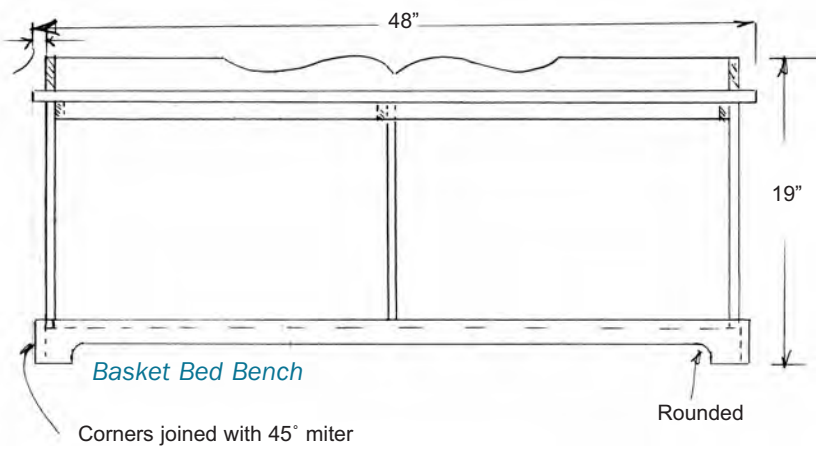
Assembly begins by attaching the ends to the bottom. An air gun with staples was used for this chore. The back and front supports are ripped to width and fastened in place. The back is fastened inside the rear rabbets, overlapping the back support. Then the center divider is cut with notches in top and bottom for the back and front supports and fastened in place. Add the cleats. Enlarge the squared drawing for the support legs,

The cabinet is assembled with an air nailer, staples and finish brads.

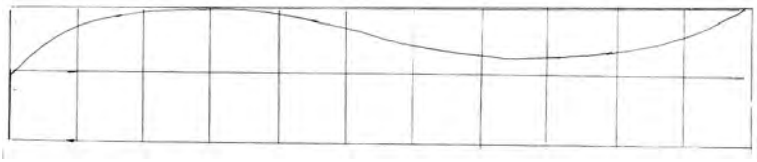
The scrolled top is cut with a jigsaw.

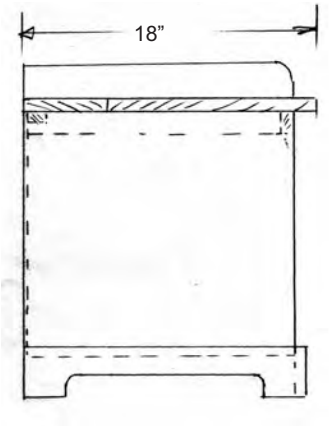
transfer to the stock and cut to shape. Sand smooth and attach with No. 6 finish nails set below the surface, and the holes filled with wood putty. Cut the top piece to size, and then cut the back piece and fronts of the ends using a bandsaw. Sand smooth and attach to the top with screws from the underside. Finish or paint the case and top, then fasten the top in place with screws through the cleats and back and front supports. **EHT**

Finally, assemble the bench, fastening the top to the case.



Bench Back Pattern





MATERIALS LIST

TOP, 3/4 X 18 X 48”, 1 REQ’D.

BOTTOM, 3/4 X 16-1/2 X 44-1/2”, 1 REQ’D.

ENDS, 3/4 X 14 X 16-1/2”, 2 REQ’D.

CENTER DIVIDER, 3/4 X 13 1/4 X 16-1/4”, 1 REQ’D.

BACK 1/4 X 14 X 45”, 1 REQ’D.

CLEATS, 3/4 X 1-1/2 X 15-1/2”, 3 REQ’D.

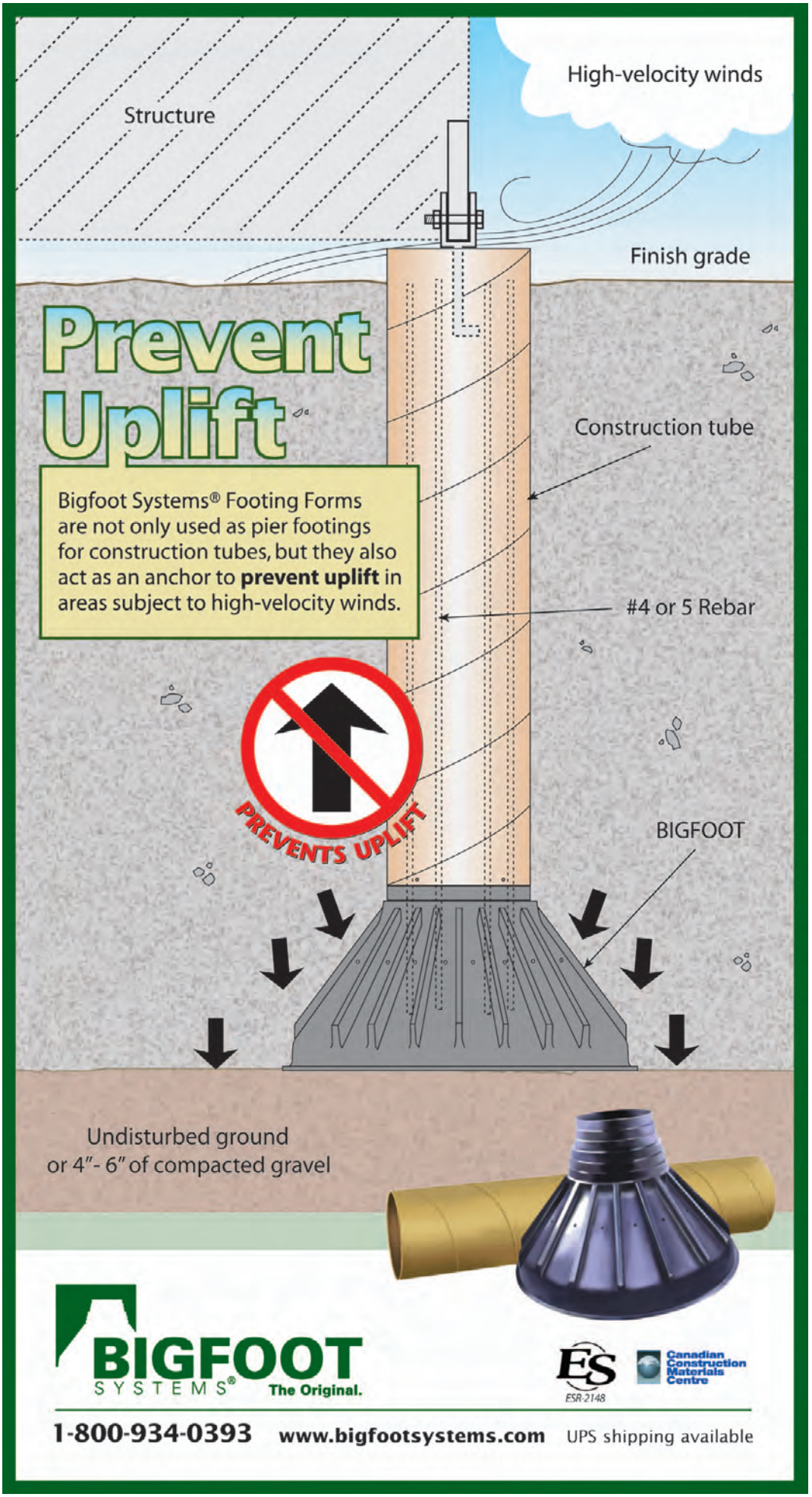
BACK AND FRONT SUPPORTS, 3/4 X 1-1/2 X 44-1/2”, 2 REQ’D.

FRONT LEG, 3/4 X 3 X 47-1/2”, 1 REQ’D

SIDE LEGS, 3/4 X 3 X 17-1/4”, 2 REQ’D.

TOP BACK, 3/4 X 2 X 46”, 1 REQ’D

TOP SIDE PIECES, 3/4 X 2 X 16”, 2 REQ’D.


Structure
High-velocity winds
Finish grade
Prevent Uplift
Bigfoot Systems® Footing Forms are not only used as pier footings for construction tubes, but they also act as an anchor to **prevent uplift** in areas subject to high-velocity winds.
Construction tube
#4 or 5 Rebar
PREVENTS UPLIFT
BIGFOOT
Undisturbed ground
or 4"- 6" of compacted gravel
BIGFOOT SYSTEMS® The Original.
ESR-2148
Canadian Construction Materials Centre
1-800-934-0393 www.bigfootsystems.com UPS shipping available

Tips for Installing Footings

Here are some useful tips to ensure your footings are installed properly and the integrity of your project is maintained:

- You should always make sure that a qualified engineer has designed the footing you are using and that it has been tested by an accredited evaluation firm.
- Select a footing that can carry the weight of your new construction and has met all the proper building codes.
- Ensure you are placing the footing form on solid ground. The more solid the ground the less likely movement will occur.
- Install your footings 4-6 inches below the frost line to avoid potential movement. If you are in an area without frost, the footing form should be placed two feet in the ground and then back-filled to hold it in place when it is being filled with concrete.
- Rebar is an important part of installation. Pour concrete into the footing system first, insert three or four number 4 or 5 rebar rods into the tube. To determine the length of rebar, measure the distance from the top of the tube to the air holes located on the Bigfoot Systems® Footing Form before you place the system in the excavation and backfill.
- Don't risk having to redo the job, do it right the first time!

Visit our web site www.bigfootsystems.com to view a complete set of our installation instructions.

Hot Water Options

Modern technology provides more choices than ever.

By Matt Weber

Based on sky-rocketing energy costs, selecting household appliances such as water heaters can be a balancing act. On one hand, homeowners want comfort and performance, and on the other they want cost-saving efficiency. And, when accommodating luxury items such as his-and-her showers, garden bathtubs or spas, the decision gets increasingly complicated. In this article, *Extreme How-To* turns to the experts to shed some light on the latest water-heating technology.

"Because residential products are changing at an extraordinary pace due to technology advancements, it is critical that consumers know what's available," says Hank Darlington, a kitchen and bath consultant who advises interior design professionals. "For example, one of the newest products available is tankless water heaters, which are truly green and more energy-efficient than conventional tank heaters since the need to maintain a heated water supply is eliminated."

So here's a look at what's new in the world of hot water, from tanks to tankless to solar-powered systems.

TANKS VERY MUCH

A household standard for many years, tank-style water heaters provide a large volume of dependable hot water. Fuel sources include propane, natural gas or electricity, and these units are the most common way to heat water in the United States. A typical residential tank water heater stores between 20 and 80 gallons, heating the water 24/7, usually at the factory setting of 120 degrees F. However, there is only so much room in the water tank, so if demand is high or the unit isn't sized correctly, the hot water can run out. The large size of a tank unit is another aspect to consider. Because of their bulk, tank water heaters are typically located in the garage or basement, but this can put the hot water source far from the point of use. When homeowners complain that it takes too long for the hot water to reach the bathroom, this is usually the reason.

Like any major appliance, the tank heaters should be carefully matched to the demands of the house. According to the experts at Rheem, upgrading a standard 5-by-9-foot bathroom to a master suite or an in-home spa may require upgrading to a larger unit, especially if the new bathroom will include a deep soaking tub with a multi-head shower system. However, if this is the case, replacing a tank water heater with another tank water heater is fast and keeps labor costs to a minimum. If a remodeling budget is tight, tank water heaters are the most affordable choice, because of the minimal labor required. The cost of professional

RHEEM TANKLESS WATER HEATERS

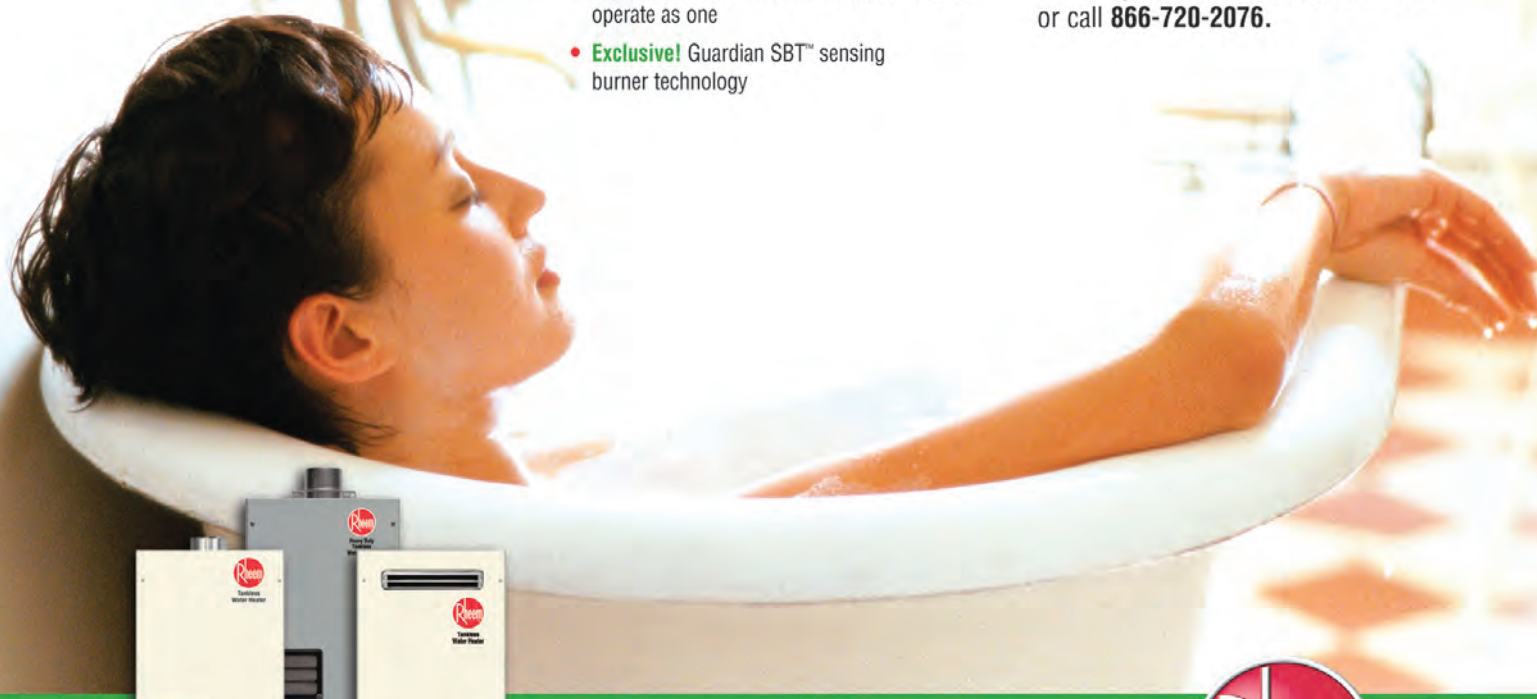
imagine

never running out of hot water again...

Tankless water heaters provide a continuous supply of hot water – bath, after bath, after bath.

- Compact, space saving design allows you to place the unit indoors or outdoors, which saves valuable square footage.
- Precision temperature control with just the touch of a finger!
- UMC-117 remote control is included and can be set from the out-of-the-box 120 degrees – up to 140 degree maximum (additional remote control thermostats are available – sold separately)
- EZ-Link™ cable available for high demand applications to connect two tankless units to operate as one
- **Exclusive!** Guardian SBT™ sensing burner technology
- **Exclusive!** Guardian OFW™ overheat film wrap
- **Exclusive!** Two high-altitude options – up to 6,560 or 9,840 ft. elevations above sea level (altitude chip required – sold separately)
- **Exclusive!** All Rheem tankless models are third-party certified by GAMA
- **Exclusive!** All Rheem models can be linked in up to 20 unit manifold installations by using the optional MIC-180 and MICS-180 manifold control assembly

Interested? For more information contact your local Rheem distributor, or call **866-720-2076.**



Tankless water heaters
Endless hot water

Rheem

relax
It's Rheem®

Rheem Water Heating
101 Bell Road
Montgomery, AL 36117-4305
www.rheemtankless.com
customerservice@rheemtankless.com

installation is typically between $500 and $1,000.

It should be reiterated that tank units also heat water even when not in use. Insulation between the storage tank and the outer jacket reduces the heat loss, but cannot entirely eliminate it. To maintain a preset water temperature, the water heater must cycle on periodically, even when there is no demand for hot water.

NO TANKS

Over the past few years, a popular topic among home-improvement enthusiasts is the advent of tankless water heaters manufactured by companies such as Rheem, Takagi, Rinnai, Noritz and Bosch. Unlike tank-style heaters, tankless gas water heaters are more energy-efficient than conventional because they eliminate the need to continually heat a large supply of water. Also called on-demand water heaters, water enters the gas or electric tankless water heater only when the hot water valve is opened, which then triggers the heating coils or heat exchanger. The amount of energy consumed is proportional to the volume of hot water used.

This energy-saving advantage is what makes tankless units today's most popular "green" hot water solution. Furthermore, no matter how many showerheads, and no matter how deep the whirlpool, homeowners will not run out of hot water if using a properly sized tankless water heater.

ARE YOU READY FOR THIS?
Drill Doctor
Check all that apply:
I have a collection of old dull drill bits I just can't throw away.
I'd rather spend my money on new tools than on buying more drill bits.
I know I should sharpen my drill bits, but I don't have time to become a sharpening expert.
I want to drill clean, precise holes every time.
I'm tired of searching through all of my used bits trying to find one sharp enough to use.
If you checked any of these, you're ready to sharpen your drill bits with Drill Doctor, THE Drill Bit Sharpener. See it in action online at
Drill Doctor®
The Drill Bit Sharpener
www.drilldoctor.com
FULL THREE 3 YEAR WARRANTY
OVER 2 MILLION SOLD
1-888-MYDRILL (693-7455)
Look for the Drill Doctor at Sears, The Home Depot, Lowes, Northern Tool, Amazon.com, and wherever you buy your tools.

The compact size of tankless unit is another benefit. The bulk of the tank-style units lies with the tank itself; so no tank, no bulk. About the size of a medicine cabinet, tankless water heaters can easily be wall-mounted indoors or outdoors, depending on the climate. This affords the ability to place a tankless water heater closer to the point of use, which solves the problem of a long wait for hot water. Although, the "long wait" problem is not solved by simply replacing a tank heater with a tankless heater in the same spot. Delays in hot water delivery have to do with the proximity of the water heater, not the type of water heater.

As far as installation, the experts at Rheem explain that

new construction is a breeze with tankless water heaters, and installation costs are comparable to those of a tank-type unit. But replacing a tank water heater in an existing home with an indoor tankless hot water heater takes a few extra steps, depending on the water heater's location and the piping layout. Because tankless heaters use more powerful burners than their tank-style counterparts, they require larger gas lines. And, indoor tankless water heaters must be vented vertically (through the roof) or horizontally (through the walls). Tankless water heaters have a higher installation cost than tank water heaters, but lower operating costs, less waste and superior hot water delivery. Get a few different quotes for labor, because

Sharpen
& Grind
All This...
WORK SHARP
WS2000
With This
Everybody likes to work with sharp tools, but not everybody likes the job of sharpening them. A bench grinder can be difficult to use—and dangerous. Welcome to the new world of tool sharpening. With the Work Sharp 2000, grinding and sharpening just about any kind of bladed tool is fast, easy, and dare we say it?—even fun. See a video demonstration online at www.worksharptools.com
WORK SHARP
TWO 2 YEAR FULL WARRANTY
From the makers of
Drill Doctor
The Drill Bit Sharpener
Ask for it at Sears, Ace Hardware, Menard's, Amazon.com, or wherever you buy your tools.

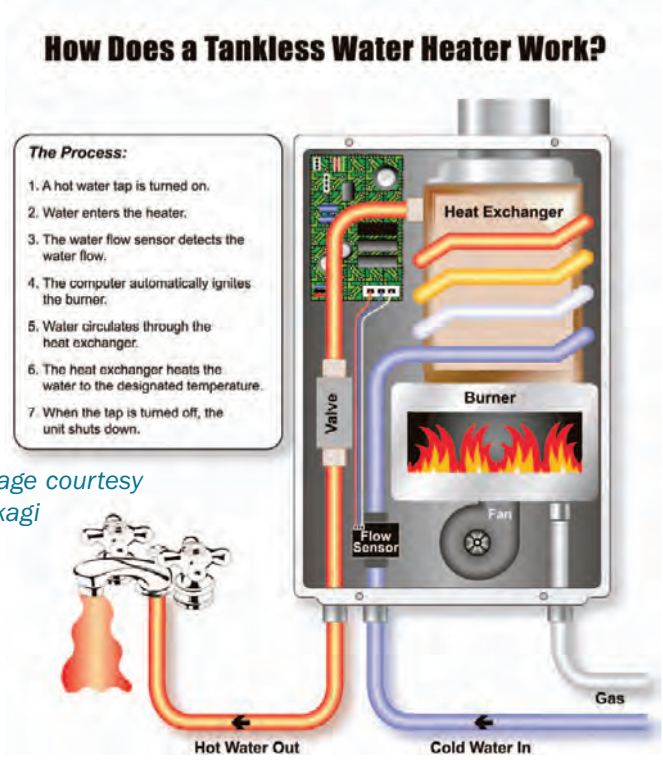

How Does a Tankless Water Heater Work?
The Process:
1. A hot water tap is turned on.
2. Water enters the heater.
3. The water flow sensor detects the water flow.
4. The computer automatically ignites the burner.
5. Water circulates through the heat exchanger.
6. The heat exchanger heats the water to the designated temperature.
7. When the tap is turned off, the unit shuts down.
Heat Exchanger
Valve
Burner
Fan
Flow Sensor
Gas
Hot Water Out
Cold Water In

Image courtesy Takagi

the installation cost can vary dramatically from contractor to contractor, due in large part to the different approaches they may take when deciding where to locate the heating unit.

SOLAR HEATED WATER

Solar water heaters use a dark-color solar collector to capture energy from the sun, making it the "greenest" home water heating option available. These solar systems can be "passive," meaning the water flows between the collection area to the storage tank via gravity or some other non-mechanical means; or "active," which uses a pump to circulate water through the system. The passive systems have both the tank and collector located on the roof, taking full advantage of the direct sunlight. However, some roofs aren't designed to support the weight of the water tank (and some homeowner associations may frown on a roof-mounted

HandiSOLUTIONS
A Division of Custom Plastics, Inc.

WANT YOUR NEIGHBORS TO BE JEALOUS?

HandiSolutions offers complete storage and organization systems for garages, utility and laundry rooms, even basements. All of your needs, from a single source. Our storage system includes **HandiWall™** slatwall panels, baskets, hooks, shelves, tilt bins, tool holders, folding work bench, cabinets, HandiCabinet modular cabinets, trim extrusions, mounting hardware, plus an extensive growing line of accessories.

Do It Yourself by contacting **HandiSolutions** to find a dealer near you.

1940 Lunt Ave, Elk Grove Village, IL 60007
Phone : 847-439-6770
www.handiwall.com

HandiSOLUTIONS
A Division of Custom Plastics, Inc.

Electro-File™ Precision Reciprocating Tool

Reciprocating Action Works When Rotary Tools Don't Or Can't

Files, sanding strips and saw blades make it the perfect tool for a variety of projects!

Turn a 10 minute job into a 60 second job!

This light weight, hand-held tool allows you to apply increased, even pressure to cut where you want, shape how you want, file and finish where you want.

Model 2100 Deluxe Kit Includes:

Model 2000 Electric Tool
12VDC Adaptor
2 Cutting Blades
1 Sanding Paddle
20 Sanding Strips
10 pc. Needle File Set w/Case

INTRODUCTORY PRICE FOR "EXTREME" USERS

September 1, 2008 - December 31, 2008

Reg $89.95 **NOW $79.95** Save $10.00

In contiguous U.S.A. add $9.95 for S & H.

Wonder-Cut™ MULTI-PURPOSE / MULTI-ANGLE SAW

Use for straight or curve cutting on wood, nails, plexiglass, PVC, conduit, aluminum, rope, rubber, plasterboard, bamboo and more!

Amazing Curve Cutting!

Model 5000 Saw & 3 Blades $8.95
Shipping & Handling $5.95

Add to an Electro-File order and shipping for your Wonder-Cut is FREE!

Model 5001 Pack of 4 Blades $1.95

Does the work of a Hack Saw, Scroll Saw & Coping Saw combined. 6" pin-end blades also fit standard coping saws

Call TOLL FREE 1-877-872-0924

Order ON LINE With Our Secure Web Site www.precisionhobby.com

P.O. Box 195
Hubertus, WI
53033-9799
sales@precisionhobby.com

PRECISION Hobby Tools INC.

Celebrating Over 12 Years In Business

MasterCard VISA

tank), and an active system is the alternative. The active systems have the tank and pump located in the house or garage, but the pump that forces circulation does require more energy than passive systems.

Even the most efficient solar water heaters usually require some auxiliary heating to boost the performance. This may be because of a high water demand in the evening or after a long period of cloud cover. An electric, gas or other fuel-type booster can be quite effective in enabling a solar water heater to provide a year-round supply of steaming hot water, but of course that also boosts energy demands.

Rheem offers the latest advancement in solar water

heating systems under the Rheem Solaraide brand. Combining a storage tank with one or two collector panels, these passive systems operate without pumps or controllers, relying instead on the natural process of convection to circulate the heat-transfer fluid.

Rheem Solaraide systems use a specially developed, freeze-proof fluid to absorb and deliver heat energy even on cold and overcast days. The fluid circulates through 35 multi-flow risers in the solar collector, soaking up the sun's energy. Typically installed on a rooftop, the collector is coated with a black polyester powder-coat paint to maximize heat absorption. The heated fluid then moves to an attached storage tank that sits above

DaSu DISTRIBUTORS
Powerful Tankless Water Heaters for Residential, Commercial & Industrial Use
Never run out of hot water again
Energy effeciant and water saving
If you are looking for a quality Tankless Water Heaters, look no further. we offer:
Years of quality experience and expertise
We only offer quality Takagi and Eemax Water heater units
Only company in North America to offer 24/7 sales and service
Toll Free 1-866-384-0500
www.MyTanklessWaterHeaters.com

We did it in our basement!
Creates warmth & comfort downstairs.
Barricade™
Modular Basement Systems
Your basement floor & concrete slab barrier to water, air and noise infiltration.
Now available at Lowe's.
Ask for Special Order # 178921.
www.ovrx.com

the collector, which keeps the fluid circulating. Heat is then transferred quickly and efficiently to the potable water inside the tank. Pressure-injected polyurethane foam insulation keeps the water in the tank warm. At night or on heavily overcast days, an optional immersed copper-sheath backup element automatically activates to meet hot-water demand 24/7.

"These systems are comparatively straightforward to install, taking perhaps a day the first time—and probably less thereafter as the installer gains experience," says Jeff Mahoney, Rheem alternative energy market manager. "To mount the system on the roof, all the installer needs is a pipe wrench, a crescent wrench, a hammer, screwdriver and drill."

Rheem Solaraide water heaters are offered in two configurations, each carrying a five-year warranty: The 47-Gallon system, measuring 97-1/2 inches long and 58-1/2 inches wide, includes a single collector panel and provides the annual hot water requirements of a home with 1-1/2 baths. The 80-gallon system, measuring 97-1/2 inches long and 91 inches wide, uses two collector panels to meet the hot-water requirements of a home with two or three bathrooms.

BOILING IT DOWN

As you can see, there are pros and cons to each type of water-heating system. The more efficient tankless systems have a greater upfront cost, but can pay off in energy savings and performance down the line. A replacement tank heater is less costly to install but requires more energy usage. And even the greenest of options—solar heating— requires some cooperation from Mother Nature to wring the most energy efficiency and performance from the system. So the next time you're selecting a system, carefully weigh your initial installation budget against your long-term utility costs. And always keep up on the latest technology, because water heating is an ever-evolving industry. **EHT**

Editor's Note: *Special thanks to Rheem Water Heating for the information provided in this article. To learn more, visit www.smarterhotwater.com.*

RATCHET DRIVER SuperG™

Gator-Grip® Super-G instantly drives over **1000 fasteners** with quick ratchet action: hex heads standard and metric from 1/4" to 3/4", damaged nuts, eyebolts up to 2" diameter and more. . .

Push the Gator-GripR Super-G onto a fastener and start ratcheting immediately; the pins automatically adjust to fit and grip. The powerful contoured handle maximizes turning torque by keeping the wrist in line with the tool. Switch from install to remove by rotating the selector barrel. The tool transforms into a high torque screwdriver with a retainer cap and 4 hex bits included.

GATOR-GRIP® RATCHET DRIVER

Visit
www.EndeavorTool.com
for more information.

Save Energy with Insulated Siding

By providing a continuous blanket of insulation over the home, insulated vinyl siding can reduce energy consumption by as much as 20 percent.

By Matt Weber

As utility costs continue to soar, building materials that save energy and natural resources are growing in demand. According to the National Association of Home Builders (NAHB), 40 percent of homeowners who recently remodeled their home used "green" energy-saving products or materials. And 63 percent of home buyers surveyed said their green purchases were motivated by the lower operating and maintenance costs that come with energy- and resource-efficient homes.

One effective way to improve home energy efficiency is with the installation of insulated siding. These siding products include a thick layer of rigid foam insulation that is fused behind the surface of the siding panel. With a solid, gapless fit, insulated siding can save lots of money in energy costs.

WHAT MAKES IT GREEN?

Insulated Siding with Fullback Technology (the full product name of the siding's expanded polystyrene backing) is an Energy Star-qualified product engineered to satisfy the demands of the U.S. Department of Energy and the EPA. By reducing energy consumption, homeowners not only save money but serve as part of the solution to the nation's dependence on fossil fuels.

"Insulated siding not only addresses our need to reduce energy consumption, it is a green product throughout its lifecycle," says Pat Culpepper, president of Progressive Foam Technologies, Inc., which manufactures the rigid foam backing for siding companies. "Our state-of-the-art manufacturing facilities are designed for minimal energy consumption and waste, and the finished product contributes to a healthier home and overall environment."

According to the manufacturers, once installed, insulated siding can withstand the perils of

CAN'T DECIDE HOW TO SIDE?

You're residing your home
or maybe you're building from the ground up.

Can't decide on color?

Having trouble envisioning the big picture?

Mitten has your solution!

enVISION it is an online colorization program to help you visualize how a home would look with different siding profiles and colors. You also have the option to change the trim, shutter and roof colors to truly get the big picture. Siding your home is a big commitment.....enVISION it before you inVEST in it! Go to www.mittenvinyl.com/envisionit.php

MITTEN INC.
www.mittenvinyl.com

weather for 50 years without significant degradation. This minimizes the use of ozone-depleting maintenance products like paints, stains and caulk. Plus, the breathable nature of the insulated siding improves indoor air quality by reducing mold and mildew that can grow in the walls of a home.

KWIK CORNER®
A finished look around windows and doors!
The Kwik Corner is the Professional Way to Make Watertight Corners with J-Channel
DON'T CUT CORNERS ANYMORE!
WWW.KWIKCORNER.COM

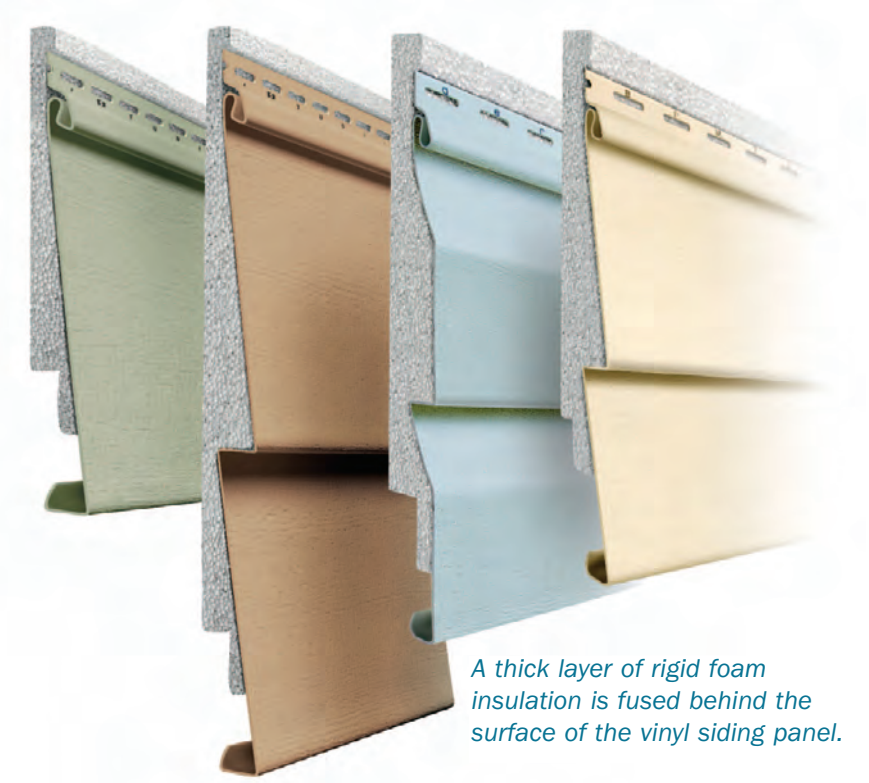
HOW DOES IT WORK?

Heating and cooling account for 50 to 70 percent of the energy costs in an average home. An often overlooked aspect of home construction is the fact that as much as 40 percent of heat loss occurs through the wooden wall studs, which are typically not insulated. These wood studs make up 1/4 of the average home's exterior surface, and insulated siding creates a solid blanket of foam around the home, insulating these otherwise unprotected areas.

Insulated siding offers an average R-value of 3.96, which is more than triple the R-value of any other exterior cladding. When used with fiberglass batting or other conventional materials that are installed between wall studs, the continuous blanket of insulation reduces energy consumption by as much as 20 percent.

DE-"MYTH"-IFYING

One concern sometimes voiced by siding contractors is a fear that the foam backing will have moisture-retention problems. Greg Duplin, VP sales and marketing for Progressive Foam



A thick layer of rigid foam insulation is fused behind the surface of the vinyl siding panel.

Technologies, assures us this is not the case. "It is human nature to expect foam to wick moisture because it is somewhat spongy," says Duplin.

"However, this material has been extensively tested, and the assumption that insulated siding contributes to moisture problems is a misconception due to ignorance of the facts. There are literally millions of square feet of insulated siding in the market today, and there has not been a single claim around water or moisture absorption."

In fact, insulated siding's unique breathability—three times that of other forms of exterior insulation—allows water vapors to escape the home, which helps reduce moisture that can lead to molds, fungi and bacteria.

HOW DURABLE IS IT?

According to the experts at Progressive Foam Technologies, many sidings without rigid foam insulation can absorb the impact of only about 60 PSI before the panels dent or break. When struck by hail, falling tree limbs or other objects, these siding products can crack or deform. However, in tests performed by an independent laboratory, rigid foam insulation increased the impact resistance of the siding up to 320 PSI. That's an increase of more than 400 percent.

WHAT ELSE CAN IT DO?

An additional benefit is that insulated siding is manufactured with an insect-fighting ingredient. This is a patented process to incorporate the EPA-registered additive into the insulation. The ingredient uses boron to deter termites from nesting in the foam, but it remains safe for humans and pets. The foam backing also eliminates the space behind the

InsulPlank insulated vinyl siding from Mitten Inc. is tested to withstand winds up to 200 mph.

siding where insects tend to congregate.

Furthermore, homeowners report that insulated siding greatly reduces outside noise and makes their homes quieter. With the home wrapped in a continuous blanket of insulation, it eliminates the rattling sound typical of some siding products. **EHT**

To learn more about insulated siding, visit www.chooseinsulatedsiding.com or call 1-800-860-3626. Photography courtesy Mitten Inc. (www.mittenvinyl.com) and Certainteed.

REVEAL YOUR OUTER BEAUTY.

LOG SIDING

WOODHAVEN
LOG & LUMBER
True to the Grain

4386 US 31 N. • Traverse City, MI
1-866-966-9663

1284 S. Mapes Rd. • Mio, MI
1-888-988-7463

woodhavenlog.com

EHT-1108

T-JAK®

ALL PURPOSE SUPPORT TOOL

The T-JAK support tool easily adjusts from 53 in. to 84 in. and safely supports workloads up to 400 lbs.

kitchen
Cabinets
Drywall Ceilings
Shelving
Deck Building
Light fixtures
Garage Doors
Bay and Garden
Windows
Tub Surrounds
Crown Molding

The T-JAK becomes your hard working helper for many difficult jobs. Do-it-yourselfers and professional remodelers rave about this handy tool!

1-800-662-3557
www.tjak.com

Solar Tiffany-style California Grape Post Cap

From ordinary to *extraordinary*, our new *post caps* help you see the light.

Solar Tiffany-style Mission Post Cap

Solar Tiffany-style Sunflower Post Cap

Round Convertible Stainless Post Cap Light

Square Convertible Copper Post Cap Light

Available in a wide range of materials and styles, Maine Ornamental's innovative products will transform your deck from ordinary to extraordinary. Our Solar and Convertible Post Caps are examples of the unique, yet practical touches you can add to your outdoor project with Maine Ornamental. Design a deck that's all your own with Maine Ornamental outdoor accessories.

MAINE ORNAMENTAL

866.910.9446
www.postcaps.com/eht

HOT PRODUCTS

WALL REPAIR KIT IN A CAN

Jig-A-Patch is the first wall repair kit in a spray-on can. Jig-A-Patch combines the three key elements needed for wall repair and paint preparation: sprayable spackle, a putty knife and a sanding pad. Jig-A-Patch shortens prep time and reduces mess. It is also simple to use: First, shake the can well, and then spray a small amount of Jig-A-Patch spackle into the damaged area of a wall. After waiting two minutes, use the integrated putty knife/cap to spread the spackle evenly. Wait two hours for it to dry. Then use the included 3M reusable sanding pad to gently sand the repaired area of the wall for a perfectly smooth finish.With a suggested retail price of $7.99 (5.5oz can), Jig-A-Patch is now available at The Home Depot. For more information, visit www.jigaloo.com

BOSCH'S NEW 18-VOLT & 14.4-VOLT LI-ION PLATFORMS

Bosch Power Tools unveils its first Litheon-powered offerings in the popular 18- and 14.4-volt size ranges. The core of Bosch's mid-range Litheon launch is a full range of cordless drill/drivers and hammer drill/drivers purpose-built to offer the best runtime, battery life, durability and performance in the industry. Whether you're an all-day, everyday user who demands uncompromising toughness or a lighter duty user who prefers light weight and value, Bosch offers six new tools to conquer the job. Bosch's Brute Tough lineup boasts best-in-class speed and runtime, perfect for the most demanding professional users and applications. For users who desire comfort, convenience and value, Bosch has upgraded its popular Compact Tough lineup. Known for lightweight, maneuverable performance at a friendly price point, Bosch's Compact Tough tools still deliver great speed, power and performance. Even when using the SlimPack battery, the Compact Tough Drill/Drivers feature up to 50 percent greater runtime than the competition. For more information, contact Bosch at 1-877-267-2499 or visit www.boschtools.com

TEMPRA TANKLESS ELECTRIC WATER HEATERS

Tempra tankless, on-demand, electric water heaters from Stiebel Eltron, Inc., are designed for whole house and various commercial applications. The Tempra features an advanced microprocessor control that allows the exact water temperature to be set via a knob and digital display on the front cover. The advanced technology ensures that the water temperature will not deviate from the set point. The compact, energy-saving Tempra provides an unlimited supply of hot water, heated as it flows through the unit. Stand-by heat losses, so common in conventional tank-type systems, are completely eliminated thereby reducing water heating bills by 15 to 20 percent. Designed and manufactured in Germany to North American standards, the rugged, space-saving Tempra contains all copper piping and heating elements to ensure many years of reliable service. There is a 3-year warranty on all Stiebel Eltron tankless, on-demand, electric water heaters. For more information, visit www.stiebel-eltron-USA.com or call us at 1-800-582-8423.

INSPIRED TO START A MAJOR PROJECT? WE KNOW WHERE TO FIND THE BEST HELP AROUND HERE.

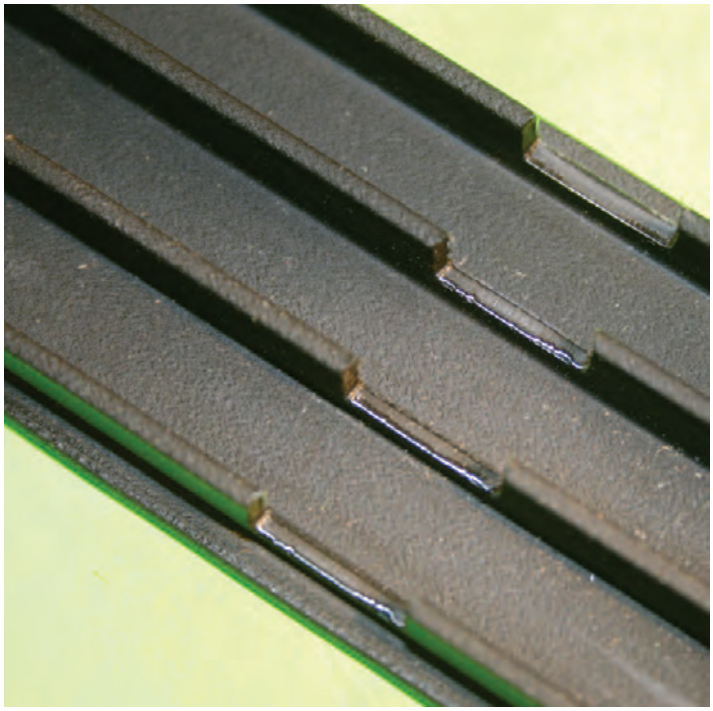
Whether you need an expert electrician or a creative interior designer, you can read reviews and find recommendations on local businesses at Superpages.com®.

we know around here **superpages.com**

HOT PRODUCTS

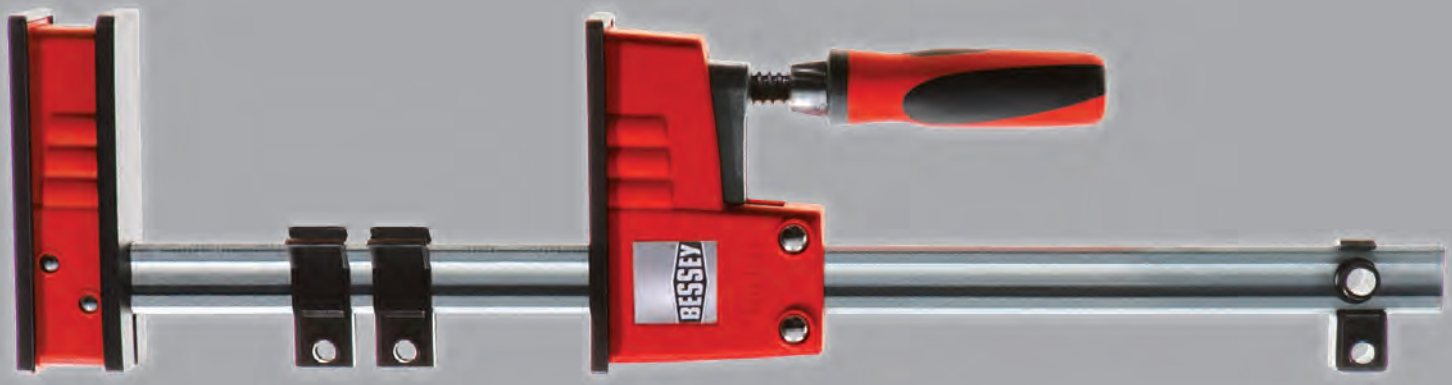
AVOID MOISTURE PROBLEMS WITH DRAIN PLANE

Water can be a destructive force causing severe moisture damage. It can diminish the value of homes and result in high repair costs, decreased property value and can lead to illness and respiratory problems. Drain-Plane offers both protection from, and a solution to, moisture intrusion. Drain Plane is a high-density, 6-foot furring strip that is easily installed vertically at the location of the studs of the exterior support wall. Its unique design creates a cavity that allows for ventilation and moisture drainage. Drain-Plane Moisture Intrusion Protection is cost effective and cladding flexible. For more information, call toll free (877) 457-2011 or visit www.drain-plane.com.



NailOut
What is NailOut?
Simple... a pneumatic nail extractor. NailOut removes nails with the ease and speed of Air. It's handheld size coupled with pneumatic power makes this tool up to 10 times faster then a cats paw. This tool specializes in removing nails from wood construction connectors and other hard-to-reach places.
Visit www.NailOut.com for all the details!
866-682-3626

BESSEY® INVENTED THE ORIGINAL PARALLEL CLAMP...
NOW THE BEST IS EVEN BETTER!



Introducing the NEW K Body® REVO™

Built bigger, better and stronger for woodworkers who want the best!

The industry leading parallel clamp just got better. Introducing the most powerful parallel clamp you can buy, the K Body® REVO™. We took the best features of the classic K Body®, a favorite among serious woodworkers for over 30 years, and added many upgrades and features to create the revolutionary K Body® REVO™. The REVO™ offers a 30% increase in clamping surface, 1500 lbs. of clamping force, a larger comfort grip handle, precise parallel clamping and the ability to quickly convert to a spreader. BESSEY®. Simply better®.

BESSEY®

BESSEY® Tools North America • 1.800.828.1004 • www.besseytools.com

HOT PRODUCTS

RATCHET-ACTION GATOR-GRIP SUPER-G

Gator-Grip Super-G instantly drives over 1,000 fasteners with quick ratchet action, including hex heads, standard and metric sizes from 1/4 to 3/4 inch, damaged nuts, and eyebolts up to 2 inches diameter and more. Push the Gator-Grip onto a fastener and start ratcheting immediately; the pins automatically adjust to fit and grip. The powerful contoured handle maximizes turning torque by keeping the wrist in line with the tool. Switch from "install" to "remove" by rotating the selector barrel. The tool transforms into a high-torque screwdriver with a retainer cap and four hex bits included. For more information, visit www.EndeavorTool.com.

Simple. Seamless. Sure-loc.™

1.

2.

3.

Yes! Sure-loc Aluminum Landscape Edging really is that simple and fast to install.

And, Sure-loc Aluminum Landscape Edging is superior. Here's why:

- Seamless connections
- Dual stake locking system is permanent
- Includes adapters for staking at any point
- Lasts a lifetime

For more info, CSI 3 part specifications, CAD files, & photos, visit our website.

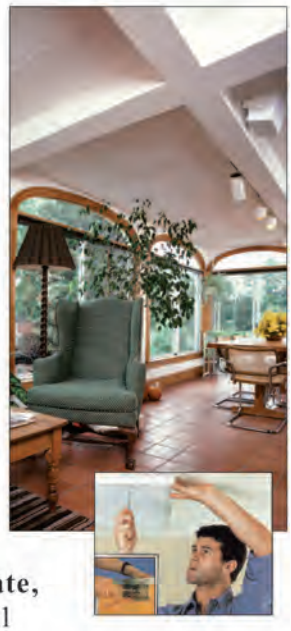
sure-loc®

1.800.SURE.LOC
surelocedging.com

ENERJOY® Radiant Heat

No noise. No dust. No drafts. No plumbing. No odor. No maintenance.

Clean, lightweight ENERJOY radiant ceiling panels install as easily as a light fixture and require no ductwork. Best of all, ENERJOY will **save 50% or more on energy & installation costs.**



For a **free sizing & estimate, call 800-544-5182** or email **info@sshcinc.com.**

SOLID STATE HEATING CORPORATION ENERJOY®

SSHC, Inc.
4 Custom Drive
P.O. Box 769
Old Saybrook, CT 06475

www.enerjoy.com

Ideal for FINISH & TRIM

EASY TO CARRY ON THE JOB SITE

LIGHTWEIGHT ALUMINUM

maxustools.com

1-888-MAXUS4U

MAXUS X-LITE

Alpha American Co. . . . 6
Alpha Clamp . . . 27
Armstrong Clark . . . 29
Avaire . . . 2
Bessey . . . 77
Better Life Technology . . . 5
Bigfoot Systems . . . 59
Cepco Tool Company . . . 46
Dasu Distributors . . . 66
Dix Systems . . . 7
DR Tools . . . 24
Drill Doctor . . . 62
Enerjoy . . . 78
Floor Junkies . . . 11
Fypon . . . 25
Gator Grip . . . 67
Gladiator Garageworks . . . 40
Grizzly Industrial . . . 53
Grout Getter Co. . . . 48
HandiSolutions . . . 64
Hannel . . . 16
Homelite . . . 49, 51
Hyde Tools . . . 39
Hyloft . . . 15
Hyrdro-Sil . . . 37
IceBlox Inc. . . . 71
Jig-A-Loo . . . 9
JNK Products . . . 19
Kwik Corner . . . 70
Lafarge . . . 4
Lam-Hammer . . . 30
Lee Valley & Veritas . . . 26
Lumber Liquidators . . . 6, 80
Maine Ornamental . . . 73
Mapei . . . 35
Maxus . . . 79
Mitten . . . 69
MP Global . . . 3
NailOut . . . 76
Ovrx . . . 66
PexSupply.com . . . 18
Pink Tool Belts . . . 76
Precision Hobby Tools . . . 65
Rev-A-Shelf . . . 31
Rheem . . . BC, 61
S&B Lawn Systems Inc. . . . 13
Salter Industries . . . 12
Skil . . . 21
STEP Warmfloor . . . 41
Sticky Ass Glue . . . 45
SuperPages.com . . . 75
Sure-loc . . . 78
Swanson . . . 23
TG Tools . . . IFC, 1
Tiger Foam Insulation . . . 10
Tile DIY LLC . . . 17
T-Jak . . . 72
Villa Deco . . . 80
Western Dovetail . . . 47
WindsorONE . . . 20
Wolmanized . . . IBC
WoodHaven Log & Lumber . . . 72
Woodworker's Hardware . . . 30
Work Sharp . . . 63

Crown Molding
Easily installed because...
It's Foam!
*Styrofoam HD with SkinTec
THE ADVANTAGES:
• Precut Corners
• Installs with caulking
• No special tools required
• Do an average room for $125
• Do it yourself
• And many more!
STYLE 110C | Carlsbad
STYLE 13G | Santa Fe
STYLE 19G | Beverly
Go green
Environmentally Friendly · Not Made From Wood
Our goal is to make your molding install as easy and beautiful as the professionals!
Visit us online and view our demo video:
www.SoSimpleCrown.com
Toll Free: 877-845-5233
Use cupon code "Xhow2" before September 30 and receive 10% off your first on-line order

Get the wood that Dean Johnson uses: Wolmanized® wood

"Wolmanized® wood has long been a respected brand – I've used it on my TV show for 20 years – and it has earned its good reputation."

For decks, fences, landscaping, and other backyard projects, one brand has stood out for decades. Today's Wolmanized® Residential Outdoor® wood offers you long-lasting lumber that is backed by a lifetime limited warranty* and the Good Housekeeping Seal. It's real wood, with all of the beauty, construction features, and environmental advantages of real wood.

When choosing treated wood for your project, choose the grade of lumber that best suits your needs and look for wood treated for your intended use – ground contact or above ground. Most of all, choose the brand that you and Dean Johnson can trust: Wolmanized® Residential Outdoor® wood. The producers of Wolmanized® wood follow quality control standards which are monitored by accredited independent inspection agencies.

Dean Johnson, host of TV's long-running home improvement show, *Hometime*

GENUINE WOLMANIZED® RESIDENTIAL OUTDOOR® WOOD

Wood Treated Right™

AUTHENTIC WOLMANIZED® RESIDENTIAL OUTDOOR® WOOD

Wood Treated Right™

See complete warranty details on the website. You'll also find useful construction tips, building plans, and help in locating a nearby dealer.

Wolmanized and *Outdoor* are registered trademarks of Arch Wood Protection, Inc.

www.wolmanizedwood.com

RHEEM GREENS

high efficiency water heating for your HOME

As the climate of America is changing and energy conservation is on all of our minds, we are proud to introduce the Rheem "GREEN" line of residential water heaters. Marathon®, Solar and Tankless.

Water heating solutions for your home – from Rheem.

Check out RHEEM GREENS. For more information call **800-621-5622** or visit **www.rheem.com**

RH101807

Residential water heaters from Rheem

Rheem

relax It's Rheem®

Rheem Water Heating
101 Bell Road • Montgomery, AL 36117-4305
800-621-5622 • www.rheem.com • sales@rheem.com

Marathon®

The most durable electric water heater ever made.

- High-efficiency design and a non-metallic, light-weight tank that won't rust or corrode
- Tank is built to last "for as long as you own your home"
- LIFETIME limited tank and 6-year limited parts warranty
- Highest energy factors available
- No smelly water – the non-metallic design eliminates chemical interactions with sulfates
- Lightweight – easy to move, handle and have installed
- 15 to 105 gallon capacities

Visit www.rheem.com or call 1-800-621-5622 for more information.

Rheem Solaraide™

Solar water heating systems from Rheem – *Hot Water Free from the Sun.™*

- Simple and reliable passive thermosiphon systems
- Closed loop systems for installation in almost any environment
- 5-Year limited warranty
- 50 Years of experience in solar technology

Qualifies for new energy tax credit (refer to your tax advisor for details)

Visit www.rheem.com or call 1-800-621-5622 for more information.

endless **hot water...**

Tankless Gas Water Heaters

The space-saving series from Rheem.

- High energy-efficiency
- Natural and LP indoor, outdoor and indoor direct vent models
- Up to 20 units can be linked in a manifold configuration to meet the hot water needs of larger applications
- 10-Year limited warranty on heat exchanger, 3-year limited warranty on parts (residential applications)

Qualifies for up to a $300 federal energy tax credit in '07 (refer to your tax advisor for details)

Visit www.rheemtankless.com or call 1-866-720-2076 for more information.